

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

BEFORE THE HONORABLE RICHARD G. STEARNS
UNITED STATES DISTRICT COURT JUDGE
AND A JURY
CIVIL JURY TRIAL DAY 6
August 8, 2022

Courtroom No. 21
1 Courthouse Way
Boston, Massachusetts 02210

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1 P R O C E E D I N G S

2 THE CLERK: All rise. Resuming on the record in civil
3 action No. 16-11613, Egenera v. Cisco.

4 You may be seated.

5 THE COURT: Good morning, counsel.

6 ALL: Good morning, your Honor.

7 THE COURT: I think this morning's issues can be dealt
8 with pretty expeditiously.9 Slide 20, I'm overruling the objection. I think there
08:45 10 is -- I agree with Egenera that Mr. Brownell's and Mr. Manca's
11 testimony is sufficient for the labeling of the slide as it is.12 With respect to slides 25 and 26, I'm going to sustain
13 the objection. This actually goes to an issue that the
14 analysis we're given simply isn't supported by the testimony,
15 so I do think it's a misleading title.16 Slide 37, I will overrule based on Cisco's use. I
17 think, again, it's a fair characterization of what the expert,
18 Dr. Sullivan, will be testifying to. He has to assume
19 infringement to be able to give the opinion that he's being
08:46 20 called on to offer.21 With respect to PX-AGI, I know there's this tendency
22 to want to think simply because it's written down it can't
23 possibly be hearsay, but it is hearsay; but it doesn't mean
24 that the expert can't rely on it and refer to it in his
25 testimony, as an expert can consider reliable history to the

1 extent that he thinks that that deserves the credit, so I think
2 it's fine for testimony but not admissible as an exhibit.

3 With respect to the Rule 50(a) motions -- 50(a)
4 motions -- it would be absolutely foolhardy for a judge to ever
5 allow a directed verdict in a case like this, interrupting the
6 evidence before a verdict is returned by the jury. But I do
7 want to give you the opportunity, which I will, to on the
8 record note that the motion is made and opposed; but I would
9 save your ammunition for post-verdict proceedings. That's
08:47 10 where we usually engage if we think that the issues are
11 sufficient of the evidence on some critical point of law or
12 some element of the case before the Court.

13 So those are the rulings I think that are required for
14 this morning, and we're waiting for one juror and then we'll be
15 off and running.

16 MR. PACKIN: Your Honor, just one clarification on the
17 Rule 50 motions. Sorry, one clarification on the Rule 50
18 motions. We're going to submit a brief, with your Honor's
19 permission. I think it will take a day to get the transcript
08:47 20 and then submit the brief, just to preserve the record.

21 THE COURT: My general rule is that, in a case like
22 this, we conclude the case, we get the jury's verdict; and I
23 know that there are going to be post-verdict motions and it
24 makes sense to give the parties time to prepare something that
25 they think is adequate to the record, so we will take a

1 reasonable --

2 MR. PACKIN: Understood.

3 There is one issue with respect to the prosecution
4 history estoppel that we suggest it might be appropriate to
5 take that out of the case before the jury verdict because if
6 doctrine of equivalents on certain issues goes to the jury,
7 then that can create a problem with the verdict after we've all
8 put so much effort into this case. So we would, at least on
9 that narrow issue, urge your Honor to --

08:48 10 THE COURT: First thing, I know this is going to the
11 Federal Circuit, but I'm sure their policies are the same. The
12 1st Circuit urges over and over again just don't jump the gun
13 on these motions because otherwise you have to do it all over
14 again; whereas if we have the verdict, they can either sustain
15 it or overturn it as the case may be.

16 MR. PACKIN: Understood, your Honor. So you don't
17 want oral motions?

18 THE COURT: No, we're just wasting time. I do want to
19 hear it, I just want to hear it at a time when I think is going
08:48 20 to be more valuable and less interruption in the flow of the
21 case.

22 Okay. As soon as we get our next juror, we'll be off
23 and running.

24 THE CLERK: All rise.

25 (Recess taken.)

1 THE CLERK: All rise for the jury.

2 (Jury entered the courtroom.)

3 THE CLERK: Resuming on the record in civil action
4 16-11613, Egenera v. Cisco.

5 You may be seated.

6 THE COURT: Good morning again, counsel.

7 Good morning again, jurors. It's great to have
8 everybody back.

9 All right. I think we're ready for our next witness.

08:58 10 MS. NOTIS-MCCONARTY: Good morning, your Honor.

11 Just one small housekeeping issue from yesterday.

12 During Dr. Jones' testimony, the following documents
13 were offered into evidence: PX-BJV; PX-BJW; PX-BJX; PX-K --
14 BKD, I apologize, that's PX-BKD; PX-BKE; PX-BKH; PX-BKI;
15 PK-BKJ; PX-BKK; PX-BKL; PX-BKM; PX-BKN; PX-BKR; PX-BKZ; and
16 PX-BLD.

17 THE COURT: Okay. So noted. Thank you.

18 MR. McDavit: Counselor, are these the third-party
19 documents?

08:59 20 MS. NOTIS-MCCONARTY: These are the third-party
21 documents.

22 MR. McDavit: Your Honor, this goes to the issue we
23 talked about yesterday morning. We still maintain our
24 objection. We don't have all of the -- apparently all these --
25 this is a subset of what was talked about yesterday, and we

1 would maintain our objection to those.

2 THE COURT: All right. The objections are noted. If
3 you can fill them further, I'd be happy to look at it
4 separately, but for the time being, it's amazing you can keep
5 track of all these.

6 MR. McDAVIT: Thank you, your Honor.

7 THE CLERK: Is there a number?

8 MR. McDAVIT: So we're still at -- since they're not
9 going in yet, we still have to resolve it, let's -- we'll go
09:00 10 with the next number.

11 MS. NOTIS-MCCONARTY: Your Honor, these are the
12 documents that were already decided on yesterday, the subset
13 that we had agreed upon.

14 THE COURT: Just work it out between yourselves.

15 MR. McDAVIT: We will. Thank you, your Honor.

16 THE COURT: And we won't lose time.

17 All right. Next witness.

18 MS. NOTIS-MCCONARTY: At this time, your Honor, I
19 would like to offer an interrogatory into the record. This is
09:00 20 Cisco's response to Egenera's Interrogatory No. 9; and I would
21 be happy to read it into the record or to offer it in writing.

22 THE COURT: You can read it. Go ahead.

23 MS. NOTIS-MCCONARTY: Cisco's -- the interrogatory
24 states: "Identify and describe all licenses, settlement
25 agreements or covenants not to sue, agreements, entered into by

1 Cisco which Cisco is a beneficiary, or of which Cisco is aware,
2 that lead to any patent or patent application from any
3 jurisdiction or nationality that, first, relates to the accused
4 product or accused functionalities or technologies similar to
5 the accused product or accused functionalities; or that, 2,
6 Cisco contends is comparable to a license that Cisco and
7 Egenera would have entered into in a hypothetical negotiation
8 in this case.

9 "Your description of each agreement should include, at
09:01 10 a minimum, the parties to the agreement; the number,
11 nationality and owner of all patent or patent applications
12 subject to the agreement; the financial terms of the agreement,
13 including monies paid, royalty rate and royalty base; the
14 effective and termination dates of the agreement; the exclusive
15 or nonexclusive nature of the license; an identification of the
16 person or persons involved in the negotiation and execution of
17 the agreement; an identification of all documents related to
18 the agreement; and whether you, Cisco, contend the agreement is
19 comparable to a license that Cisco and Egenera would have"
09:02 20 entered -- "would have agreed to in a hypothetical negotiation
21 in this case."

22 Cisco's response to Interrogatory No. 9 is as follows:
23 "To the extent this interrogatory is understood and calls for
24 relevant, non-prejudicial information, Cisco will respond to
25 this interrogatory pursuant to Federal Rule of Civil Procedure

1 33(d) at the appropriate time by producing and identifying
2 relevant non-privileged documents, if any, maintained by Cisco
3 in the ordinary course of business and found after a reasonable
4 search.

5 "Cisco reserves its right to supplement or amend its
6 response to this interrogatory as discovery and its
7 investigation in this action proceed in accordance with the
8 court's schedule."

9 Cisco's first supplemental response to Interrogatory 9
09:03 10 is as follows: "Pursuant to Federal Rule of Civil Procedure
11 33(d), agreements that relate to the accused products can be
12 found in the documents with" productions number -- "production
13 Nos. Cisco 00098393 to Cisco 00098423.

14 "Cisco reserves the right to supplement or amend its
15 response to this interrogatory as discovery and its
16 investigation in this action proceed in accordance with the
17 court schedule."

18 Cisco's second supplemental response to Interrogatory
19 No. 9 is as follows: "Cisco clarifies that pursuant to Federal
09:03 20 Rule of Civil Procedure 33(d), agreements that relate to the
21 general technical field of the accused products can be found in
22 the documents with production Nos. Cisco 00098393 to Cisco
23 00098423.

24 "Cisco does not concede that any agreement found
25 within the documents within production Nos. Cisco 00098393 to

1 Cisco 00098423 directly relate to any of the accused products,
2 individually or as a whole.

3 "Cisco reserves its right to supplement or amend its
4 response to this interrogatory as discovery and its
5 investigation in this action proceed in accordance with the
6 court's schedule."

7 Cisco's third supplemental response to Interrogatory
8 No. 9 is as follows: "Cisco supplements its response to this
9 interrogatory by incorporating Dan Lang's February 28, 2018,
09:04 10 deposition transcript, as well as the documents identified with
11 the production Nos. Egenera 02299275 to 76.

12 "Cisco will further respond to this interrogatory
13 through its expert reports which will be served according to
14 the schedule" according -- "schedule entered into this case."

15 And that completes Cisco's response to Interrogatory
16 No. 9.

17 THE COURT: Very good.

18 MS. NOTIS-MCCONARTY: At this time, your Honor,
19 Egenera will play the deposition video of Mr. Daniel Lang, who
09:05 20 is the vice president of intellectual property and deputy
21 general counsel at Cisco. And the time is 2 minutes and 56
22 seconds for Egenera.

23 THE COURT: Let's proceed.

24 (Played video deposition.)

25 THE COURT: All right.

1 MR. BATCHELDER: Good morning, your Honor. Egenera
2 calls as its next witness Dr. Ryan Sullivan.

3 RYAN SULLIVAN, having been duly sworn by the Clerk,
4 was examined and testified as follows:

5 THE CLERK: Thank you. You may be seated.

6 Could you please introduce yourself, spelling your
7 last name for the record.

8 THE WITNESS: Good morning. I am Ryan Sullivan,
9 S-u-l-l-i-v-a-n.

09:09 10 DIRECT EXAMINATION

11 BY MR. BATCHELDER:

12 Q. Dr. Sullivan, good morning.

13 A. Good morning.

14 Q. Have you prepared demonstratives to help you explain your
15 testimony to the jury this morning?

16 A. Yes, I have.

17 MR. BATCHELDER: Mr. Fitzgerald, would you pull those
18 up, please.

19 Q. All right. Are these those slides?

09:09 20 A. Yes, they are.

21 Q. All right. Would you please describe your educational
22 background to the jury, looking at slide No. 2.

23 A. Yes. I have a bachelor's degree, a master's degree, and a
24 PhD, all in economics and all from the University of California
25 in San Diego.

1 Q. And for your PhD studies, why did you choose the
2 University of California San Diego?

3 A. That gave me an opportunity to work in the field of
4 mathematical economics, and UC San Diego is typically thought
5 of as one of the very top schools for that; and I had the good
6 fortune to work directly with two economists that received the
7 Nobel Prize in mathematical economics.

8 Q. And since receiving your PhD there, have you had any
9 continuing role at the University of California San Diego?

09:10 10 A. Yes, I have. I have continued to serve on what is known
11 as the Economics Leadership Council, and in this role I provide
12 guidance and advise the faculty in the department of economics
13 on the practice of economics in private industry; and I also
14 serve as a mentor to graduate students within the department of
15 economics.

16 Q. Have you published academic papers?

17 A. Yes, I have. I've published articles in what are referred
18 to as top-tier peer-reviewed journals, such as The Journal of
19 Finance, Journal of Econometrics and the International Journal
09:11 20 of Forecasting; and I have also published in journals involving
21 intellectual property and patent damages as well.

22 Q. What do you mean by a peer-reviewed journal?

23 A. That is a process by which the work that I perform gets
24 evaluated by other economists, referred to as referees, to
25 determine whether the work I performed is a sufficient advance

1 in the science of economics that would be worthy of publication
2 in one of these journals.

3 And my work has been -- gone through that review
4 process; and I, too, serve as a referee to evaluate the work of
5 other economists.

6 Q. A moment ago I think I heard you mention the phrase
7 "intellectual property." What does that refer to?

8 A. Intellectual property generally refers to patents,
9 trademarks, copyrights, and trade secrets.

09:12 10 Q. Have you received any accolades in connection with your
11 work in that field of intellectual property?

12 A. I have. I've been recognized by an organization known as
13 IAM, Intellectual Asset Management. They are a data analytics
14 and news organization in the intellectual property space. They
15 recognize economic experts for patents, and I was honored from
16 2014 -- which was the first year that they started performing
17 that review and analysis -- every year since then.

18 Q. So you've said that you're a professional economist. What
19 work do you do as an economist?

09:13 20 A. Well, I serve as president of a company known as
21 Intensity. We are an economics and data science company. And
22 in my work as an economist, I use data and information, and
23 analyze revenue, costs, and profitability to assist companies
24 in making strategic decisions, so -- this includes work
25 including performing valuations, license negotiations, market

1 analysis and pricing decisions.

2 I also serve as an expert in litigations, such as this
3 one. And as president of the company that I work with, I
4 oversee the strategy for the company.

5 Q. Is this your first time testifying at trial as an expert
6 economist?

7 A. No, I have done so over 25 times.

8 Q. And about how much of your work is related to
9 litigation-related work as opposed to other kinds of economic
09:14 10 work?

11 A. Approximately 50 percent of my work is related to
12 litigation.

13 Q. And when you're working in that litigation space, how much
14 work is for plaintiffs versus defendants?

15 A. It is split quite evenly. So approximately half of my
16 litigation-based work is on behalf of plaintiffs and half on
17 behalf of defendants.

18 Q. And in that litigation work, what kind of entities have
19 you represented?

09:14 20 A. All kinds of entities, large and small. Some companies
21 that you likely would have never heard of, others that you
22 would have. And I've also had the opportunity to work with a
23 number of universities.

24 Q. Can you give us some examples?

25 A. Sure. In the technology industry I've worked with and on

1 behalf of Apple, Microsoft, IBM, Adobe. In the educational
2 realm I've worked with and on behalf of Harvard, MIT, and
3 Columbia University, as examples.

4 Q. Could you give just a few examples of some of the projects
5 you've worked on outside of litigation?

6 A. Sure. I had the good fortune of working on some really
7 interesting projects. A couple of examples in the sports
8 industry is I worked with the NBA and the players association
9 for the NBA in their collective bargaining agreement back in
09:15 10 2016, and I was the lead economist heading up that negotiation
11 so that they could come to an agreement on compensation for the
12 players.

13 A second example, more locally to here, I worked on
14 behalf of the Boston Red Sox to do pricing for their tickets.
15 And the goal there was to be able to have variant differential
16 pricing depending on the game and the location in the stadium
17 to be able to get more fans into the seats of the stadium.

18 Outside of the sports industry I worked on a project
19 involving Home Shopping Network. You may recall a number of
09:16 20 years ago there was a movie called "Joy," that was based upon
21 the rags-to-riches story of Joy Mangano with the Miracle Mop,
22 and it was a movie with -- played by Jennifer Lawrence, Robert
23 DeNiro, and Bradley Cooper.

24 But the economics side of it was the switch from Home
25 Shopping Network to go from just online and on TV and video

1 into brick and mortar, and they wanted to use that movie to
2 help generate sales in Bed Bath & Beyond and Target, and so I
3 worked with them to establish their business plan, their launch
4 strategy, the logistics, and all the pieces on the economic
5 analytical side.

6 Q. Have you done any work for nonprofit organizations?

7 A. I have. I was honored to serve as a treasurer and an
8 officer on the board of trustees for an organization known as
9 San Diego Zoo Global and Wildlife Alliance, wherein I had
09:17 10 fiduciary responsibilities over all the financials for the
11 organization.

12 Q. Can we turn to slide 3 in your deck.

13 What was your task as an expert in this case, sir?

14 A. I was asked to determine the damages incurred by Egenera
15 as a result of the infringement by Cisco of the '430 patent.
16 And more specifically, Egenera is seeking a form of damages
17 known as a reasonable royalty, and so I have determined, using
18 my expertise, my research, my analysis in this case, what the
19 appropriate reasonable royalty should be.

09:17 20 Q. You have formed opinions regarding the value of the
21 reasonable royalty in this case?

22 A. Yes, I have.

23 Q. Why don't we summarize those now and then we can drill
24 into how you got there.

25 Let's look at slide 4.

1 What are we looking at here?

2 A. This is the basic structure and formula that I used to
3 calculate a reasonable royalty.

4 First off, I identified the number of servers that are
5 used in infringing UCS systems.

6 I then identified and determined what the appropriate
7 royalty per server is for each of those infringing systems with
8 those servers, multiplied those two together to get to the
9 reasonable royalty.

09:18 10 And this structure is important because it allows that
11 royalty and the corresponding payment to scale with the extent
12 of use of the patented technology; in other words, the more
13 infringing systems that are sold, the more servers that are
14 sold, the more value to Cisco, and correspondingly, the larger
15 is the reasonable royalty.

16 Q. That's why you used number of servers on the top to get at
17 that scale issue?

18 A. Exactly.

19 Q. All right. And what were your conclusions?

09:19 20 A. On the next slide, No. 5, I've populated here the ultimate
21 answer. And I determined that the number of servers in
22 infringing UCS systems is 353,496 servers. I determined that
23 the appropriate royalty per server is \$1,050, and being an
24 economist, even more precisely it's \$1,049.67 plus a bunch of
25 other trailing digits, so that when we perform the actual math

1 here, multiplying those two, the reasonable royalty is
2 \$371,056,482.

3 And this is for the period from August 5, 2016,
4 through February 28, 2022.

5 And this is what I would refer to as the damages
6 period. Damages begin to accrue when the complaint was filed
7 in this case, which is the early date there, the August 5,
8 2016. And the damages are calculated through the end of the
9 last production of financial data, sales data, by Cisco in this
09:20 10 case. And those data go through February 28th of this year.

11 So this does not include the time period thereafter,
12 you know, March, April, May, June, July of this year, and then
13 going on out through patent expiration is not included in this
14 damages period.

15 Q. All right. Thank you, sir, for that summary. Let's back
16 up.

17 What information did you consider in formulating your
18 opinions?

19 A. On slide 6, I explain and show some of the categories of
09:21 20 materials that I reviewed and considered.

21 There was a lot of information that I reviewed. This
22 included the '430 patent, of course, other patents that had
23 been produced and cited and referenced throughout the
24 litigation; looked at financial data for both parties, their
25 company documents.

1 I performed marketplace research on the industry to
2 understand the financials.

3 I looked at agreements that were entered into by the
4 parties.

5 Read through, reviewed, considered a lot of witness
6 testimony. There were over 50 depositions taken of fact
7 witnesses.

8 I conducted an interview with Professor Jones, who
9 testified yesterday.

09:21 10 I've reviewed expert reports, performed research into
11 the academic literature, looked at legal filings.

12 So really a lot of information.

13 Q. Would you summarize for the jury, please, at a high level
14 what work you did prior to trial in formulating your opinions?

15 A. Yes. So on slide 7, I performed my work, I memorialized
16 it all in an expert report that I submitted in April 2018. All
17 told it was over 1,000 pages, so it included 94 pages of text,
18 and within that was 449 footnotes with supporting citations and
19 information, 954 pages of data, analysis, tables and other
09:22 20 information. I supplemented that in June 2018, and then I sat
21 and provided deposition testimony that month as well.

22 And then, earlier this year, in March 2022, I updated
23 those calculations with the updated data that came from Cisco
24 to be able to provide that reasonable royalty for the period
25 that goes through February of this year.

1 And there's really a couple of purposes to performing
2 all of that work. One is to memorialize the work that I did,
3 because it is voluminous and based upon a lot of information.

4 The second is to be able to provide full transparency
5 to Cisco, to the Court, to you, the jury, in terms of what it
6 is that I did so that can be fully evaluated.

7 Q. So you said that your role is to provide a reasonable
8 royalty or to determine one. Can you define that term for us,
9 please?

09:23 10 A. Sure. So on slide 8, I have copied here a piece of 35
11 U.S. Code Section 284. So 35 is the U.S. Code on patents and
12 patent law. Section 284 relates to damages. And here, I'm
13 just going to read this for you, because this is what provides
14 context for me as an economist conducting my work.

15 It says that: Upon finding for the claimant, the
16 court shall award the claimant damages adequate to compensate
17 for the infringement, but in no event less than a reasonable
18 royalty for the use made of the invention by the infringer.

19 And the primary takeaway there in calculating a
09:24 20 reasonable royalty is that it is based upon the use made of the
21 invention by the infringer. And here, you know, that would be
22 Cisco. So the reasonable royalty should be based upon Cisco's
23 use of the patented technology.

24 Q. And in the interrogatory response that my colleague read
25 in this morning by Cisco, it referenced something called a

1 "hypothetical negotiation." Did you hear that?

2 A. I did.

3 Q. What is that?

4 A. A hypothetical negotiation is a typical -- it's the most
5 common framework for determining a reasonable royalty. It's a
6 negotiation that we hypothesize would have occurred between
7 Egenera and Cisco right on the eve of infringement, right
8 before UCS is launched and right before that infringement
9 begins, to determine what the royalty would be. It's the
09:25 10 outcome of this hypothetical negotiation that is the reasonable
11 royalty.

12 And we refer to it as "hypothetical" because the
13 negotiation did not actually happen. Had it happened, we all
14 would not be here in this courtroom today because that would
15 have been resolved long ago. But it didn't happen, and so we
16 construct that framework, and I'm going to walk you through
17 that today in terms of how that royalty is ultimately
18 determined.

19 Q. Does the law associate legal requirements with that
09:26 20 hypothetical negotiation?

21 A. Yes, it does. So on slide 9, there are three requirements
22 that, as a damages expert, I am required to implement into my
23 analysis.

24 The first is an assumption that the patent is valid.
25 What this means is that at this hypothetical negotiation, the

1 parties would agree and acknowledge that the patent is valid.

2 That would not be disputed at this negotiation.

3 Similarly, the party -- I'm asked to assume that the
4 patent is infringed. So here again, at this negotiation, both
5 Cisco and Egenera would recognize that the patent is infringed,
6 which is a little bit different than just a typical
7 run-of-the-mill negotiation that might be happening outside of
8 a patent litigation. There, parties often will dispute whether
9 the patent is valid. They'll dispute whether the patent is
09:27 10 infringed. But at this hypothetical negotiation, the parties
11 go into that negotiation actually agreeing and believing in the
12 validity of the patent and that it is infringed.

13 And then finally, I need to assume that the parties
14 are willing to enter into this agreement. Both Cisco and
15 Egenera would enter into this agreement, and it's a negotiation
16 where neither side can just simply walk away and say, No, thank
17 you. They have to come to an agreement for a license to the
18 '430 patent and determine the amount that would be payable from
19 Cisco to Egenera.

09:27 20 Q. So for the hypothetical negotiation here in this case,
21 would you please fill in for the jury some more information
22 about parties and timing.

23 A. On slide 10, I have a depiction here.

24 So the parties would include Egenera as the patent
25 holder, they would be the licensor; Cisco, the licensee,

1 they're the ones that would be seeking rights to utilize the
2 patent, and, thus, would be paying a royalty for those rights.

3 And this negotiation would occur in July 2009, and
4 that's right at the time that Cisco is launching the UCS
5 system.

6 And one thing to note here is that the hypothetical
7 negotiation occurs back in July of 2009, whereas the damages do
8 not begin until August 2016. So there's a little bit of a
9 differential there. And this is part of the reason why it
09:28 10 makes sense for the parties to enter into what's called a
11 running royalty. I mentioned that the royalty would be per
12 server so that it can cover the time period throughout for
13 different periods of time based upon the actual use of the
14 technology by Cisco.

15 Q. What information would the parties to that hypothetical
16 negotiation have been discussing and considering?

17 A. So moving on to slide 11, you know, we refer to this as a
18 hypothetical negotiation, but it is actually based in
19 real-world facts. And the parties to this negotiation, Egenera
09:29 20 and Cisco, would consider all of the available information.
21 You can think of it as all of the information that has been
22 produced and provided in this litigation, along with research
23 and analysis.

24 What's interesting is in this hypothetical negotiation
25 the parties share all information, and all that information is

1 known. It's very much like playing a card game where all of
2 the cards are up on the table, and it's not as though one
3 entity is sitting there holding their cards close to their
4 chest and not letting them know that information; but, rather,
5 strategies are known, anticipations of how products are going
6 to perform, the actual sales of those products, things that
7 actually might otherwise be considered private information is
8 shared. And that's one of the unique aspects of a hypothetical
9 negotiation and the framework used for calculating a reasonable
09:30 10 royalty.

11 Q. Just to be clear, the cards are face up on the table.

12 A. That's right.

13 Q. As an economist, have you handled what are called
14 Georgia-Pacific Factors and applied those?

15 A. Yeah, so on slide 12, there are a set of 15 factors that
16 were set forth by a court in 1970 in a case involving the
17 Georgia-Pacific paper company. And these are factors that can
18 be informative and provide guidance in determining a reasonable
19 royalty. So I considered all of these factors.

09:31 20 There's a lot of verbiage and content here, I'm not
21 going to read through it. So what I'll do is summarize those
22 into different categories, and then we'll go through each of
23 those categories to help show you how I get to my answer.

24 Q. All right. Let's turn to that first category.

25 Slide 14, please.

1 Actually, here you've just categorized them. Do you
2 want to just quickly summarize what you've done?

3 A. Yeah, so here, slide 13, for factor -- Georgia-Pacific
4 Factors 9, 10, and 14, those relate to the importance of the
5 patent. Factors 4 and 5 relate to the commercial and
6 competitive relationship between the parties. Factors 3, 7,
7 and 11 involve the structure of the license. Factors 1, 2, and
8 4 involve licensing. Factors 6, 8, 11, 12, 13, and 14 relate
9 to the contribution of the patented technology to Cisco; and
09:32 10 the ultimate answer is reflected in the outcome of the
11 hypothetical negotiation, and that's Factor 15 from
12 Georgia-Pacific.

13 And there's overlap among these factors, which is why
14 I think the grouping can be very helpful.

15 Q. All right. Let's turn to the first one.

16 Next slide, please.

17 This highlights the importance of the patent. Could
18 you, again, quickly summarize what that is about.

19 A. Yes. This is evaluating whether the patented technology
09:32 20 that's at issue is a small or minor incremental improvement or
21 if it is a pioneering breakthrough technology. And the
22 evidence here clearly demonstrates that the technology as
23 claimed in the '430 patent was a pioneering breakthrough
24 technology for the architecture of the accused products in this
25 case.

1 Q. First of all, do you have an understanding of the
2 invention claimed in Egenera's '430 patent?

3 A. I do. Now, I approach my work as an economist, not as a
4 computer scientist, and so I have evaluated, developed an
5 understanding of the patent in part from Professor Jones, who
6 testified yesterday. In conducting my work, I held an
7 interview with Professor Jones, and then I have also reviewed
8 his reports and his deposition testimony, and of course was
9 here for his trial testimony yesterday.

09:33 10 Professor Jones explained to me that the technology
11 claimed in the '430 patent provides a platform for server
12 provisioning, management and administration.

13 Q. Did you memorialize that conversation you had with
14 Professor Jones?

15 A. Yes, I did. As part of the report that I submitted,
16 Attachment A4 to my report provides an overview of the
17 interview that I had with Professor Jones.

18 Q. In your understanding, have any of Egenera's products
19 practiced this '430 patent?

09:34 20 A. Yes. Both the -- it's the BladeFrame PAN Manager system
21 that was developed by Egenera that, as I understand it,
22 practiced the claims of the '430 patent.

23 Q. And you've been in this courtroom since the beginning of
24 trial, right?

25 A. Yes, I have.

1 Q. And you heard Mr. Manca's testimony, then?

2 A. I did.

3 Q. And he referred to this patent as a huge milestone.

4 A. He did. He circulated an email within Egenera at the time
5 of the issuance of the patent and he referred to this as the
6 big one, which really, I think, sets the stage as to how
7 Egenera viewed the technology and as others also -- I'll
8 show -- viewed Egenera's technology and innovations.

9 Q. So how was Egenera's patented architecture received in the
09:35 10 industry?

11 A. On slide 16 there were a number of accolades,
12 recognitions, and awards that Egenera received for the work
13 that they do in their innovations from Waters magazine, Ernst &
14 Young, from the YankeeTek Ventures, Network World, Blade
15 Systems Insight. So a number of different awards and
16 recognitions.

17 In particular on slide 17 for Waters magazine, I
18 found this one to be really interesting from the perspective of
19 an economist evaluating a royalty. They explained that Egenera
09:36 20 was an early trailblazer and it was the first new server
21 architecture in a generation. And this is a big deal because,
22 two things: One, this is not just a feature, this is not just
23 a little piece of the overall system. This is an all-new
24 architecture. And this is the first new architecture in a
25 generation and really was disruptive to the industry, as I'll

1 show to you later on.

2 Q. So applying this back to your first cluster of the
3 Georgia-Pacific Factors, importance of the patent, what is this
4 saying to you?

5 A. Well, this says that the patent is very important and that
6 Cisco would find it to be very valuable to their products as
7 they are launching into the industry of data center server
8 marketplace.

9 Q. Has Cisco even recognized Egenera's innovation?

09:37 10 A. They have. So on the next slide, 18, up top I have a clip
11 or a piece of the deposition testimony from Jason Shaw, who was
12 a technical marketing engineer for UCS at Cisco. And he
13 explained that, in his view, Egenera had innovative technology,
14 they were doing something that no one else did, and that he
15 would call them an innovator.

16 And earlier on, he had sent an email that says
17 "Egenera is wicked cool."

18 And I think that's just a fun way to be able to convey
19 that Egenera did have something very unique, special, and
09:38 20 innovative.

21 Q. That bottom document, the "Egenera is wicked cool"
22 document, did you cite that in your expert report?

23 A. Yes, I did.

24 MR. BATCHELDER: Your Honor, that's PX-AJE, move that
25 into evidence, please.

1 THE COURT: So moved.

2 THE CLERK: Can we have a number, what number is next?

3 It's unclear at this point.

4 MR. BATCHELDER: It's 543, JTX.

5 THE CLERK: Thank you.

6 (Exhibit JTX-543 marked for identification.)

7 BY MR. BATCHELDER:

8 Q. In your understanding, sir, how does Cisco use the '430
9 patent?

09:38 10 A. On slide 19, I depict this.

11 As I understand it, Cisco has implemented the
12 technology claimed in the '430 patent in their UCS products, so
13 that is the Unified Computing System for Cisco. And really,
14 this was what allowed them to enter into the data center server
15 marketplace.

16 Q. Is UCS the same thing as server?

17 A. Well, the Unified Computing System includes servers, but
18 it is broader than that. It includes servers, other hardware
19 and software.

09:39 20 Q. When did Cisco begin selling UCS?

21 A. July 2009. And that corresponds to the date of the
22 hypothetical negotiation.

23 Q. Did Cisco have any other data center server products prior
24 to UCS?

25 A. No, it did not. So this was their first data center

1 server product and their launch into that marketplace.

2 Q. You heard the trial testimony of Mr. Manca and
3 Mr. Brownell about Cisco feeling left behind, left out of the
4 data center space?

5 A. I did.

6 Q. And how does that fact, that Cisco felt that way, left out
7 of the data center space and wanted to gain access, how does
8 that impact your opinions?

9 A. On slide 20 I have some pieces from a presentation that
09:40 10 was put together by Egenera based upon a meeting that they had
11 had with Cisco back in 2004, and this reflects what Cisco told
12 Egenera, as memorialized by Egenera at that time, and I discuss
13 this and describe this in my expert report.

14 On the left-hand side here, and this is JTX-0267, you
15 can see that there was high interest on Cisco's part and that
16 Cisco feels left out of the greater consolidation movement and
17 that they want to go further into the data center.

18 This is corroborated on the top right where Mario,
19 Luca, and Soni, who were the ones, the executives who had left
09:41 20 Cisco to form Nuova and develop this system before going back
21 to Cisco, they had high regard for the work that was being
22 performed by Vern Brownell at Goldman Sachs and at Egenera, but
23 they were feeling as though they -- that Cisco was out of the
24 core of the data center.

25 And in the center there at the bottom, from -- as a

1 matter of economics, they're explaining that Cisco views
2 Egenera's technology and the value-added services as key. So
3 this is a recognition, at-the-time contemporaneous document,
4 that is very important to Cisco and their business strategies.

5 And here again, this is information that would be
6 known at the hypothetical negotiation.

7 Q. So in your understanding, how does the '430 patent
8 contribute to UCS?

9 A. On slide 21, there are really two key contributions of the
09:42 10 '430 patent to recognize here.

11 The first is that it is considered the essence of UCS,
12 the essence of the Unified Computing System, and as I
13 understand from Dr. Jones, it is what makes UCS what it is and
14 the benefits that it provides.

15 I also evaluated and considered the alternatives that
16 Cisco could have used instead of using the technology claimed
17 in the '430 patent. In other words, you know, are there
18 noninfringing alternatives that they could have simply turned
19 to. And both technologically, as determined by
09:43 20 Professor Jones, and economically in terms of my evaluation,
21 there were no such alternatives that were available to Cisco.
22 And that means that it was this patented architecture, the '430
23 patented architecture, that enabled Cisco to launch into the
24 data center server marketplace.

25 Q. You're not saying, though, that Cisco didn't add some

1 features to UCS beyond the patented architecture, are you?

2 A. No, not at all. I mean, there are other features that
3 were contributed by Cisco to the UCS product, but the
4 fundamental architecture was provided by the technology claimed
5 in the '430 patent.

6 Q. So what are the benefits that the '430 patented
7 architecture provided to UCS, in your understanding?

8 A. Two key benefits, here on slide 22: Cost savings and
9 increased efficiency.

09:44 10 As Professor Jones explained, the patented technology
11 enables a system that has -- that saves on the cost of the
12 hardware, it reduces power consumption, and it has fewer points
13 for management. And these items provide cost savings to the
14 customers and it provides increased efficiency and business
15 flexibility. And as I'll show you, it was these patented
16 benefits that allowed Cisco to enter into a marketplace that
17 had entrenched competitors with a differentiated product, a
18 product that was actually priced higher than competitors, and
19 be able to do so in a way that had tremendous sales growth and
09:45 20 success based upon these patented benefits.

21 Q. So Professor Jones explained these benefits to you?

22 A. Yes, that's right.

23 Q. And did Mr. Brownell, Mr. Manca testify about them also?

24 A. Yes. It's the same set of benefits that Professor Jones
25 says were conveyed and described and claimed in the patented

1 technology, same benefits that were being touted by
2 Mr. Brownell and Mr. Manca in terms of what the technology
3 provided. And also, as I'll show you, it's the same set of
4 benefits that were being touted and promoted by Cisco with
5 regards to UCS.

6 Q. Let's take a look at slide 23 with that last point in
7 mind.

8 What are we looking at here?

9 A. There are many documents that describe and convey the
09:46 10 value of the patented benefits to Cisco's UCS system. And I
11 detail these in my expert report, and it includes internal
12 Cisco documents, marketing materials, press releases, company
13 filings, analyst reports, and more.

14 Q. All right. And let's look at slide 24, please.

15 A. So these are two examples of documents that Cisco created
16 that demonstrate that Cisco is promoting the benefits of the
17 patented technology.

18 Up top is JTX-0162, it's a data sheet from Cisco
19 describing that UCS is a next-generation data center platform
09:47 20 designed to reduce total cost of ownership and increase
21 business agility. These are exactly the items I was just
22 describing.

23 And it is because of the reduced total cost of
24 ownership that Cisco, then, is able to charge higher prices
25 for.

1 Q. So these are the same benefits you heard about from
2 Professor Jones?

3 A. Yes.

4 Q. And from Mr. Brownell and from Mr. Manca?

5 A. That's right. In fact, at JTX-0394 on the bottom, it
6 confirms this. Reduced complexity, simplified management, and
7 the result of lower management and maintenance cost.

8 Q. Have you seen any evidence that these demands -- excuse
9 me -- these benefits effected the demand for Cisco's UCS
09:47 10 product?

11 A. I did. And I have a couple of examples to show, starting
12 on slide 25. So this is JTX-0142. It's a document that
13 provides information that Cisco developed in terms of a survey
14 they conducted with over 600 customers asking them, you know,
15 in effect, what was going to be most important in choosing
16 between computer vendors.

17 And here you'll see that what they report, TCO will be
18 two times more important to respondents -- that's customers --
19 than any other factor.

09:48 20 And you can see that in the first line here, right
21 about -- let's see if -- that piece there. So total cost of
22 ownership at 27. And that is twice as much as any other.

23 Similarly, if we take a look at the next slide, on
24 slide 26, which is JTX-0404, this is work that was performed by
25 IDC. They are what is known as a market intelligence company,

1 so they do research and analysis in the market and then report
2 on it.

3 They have a report titled here: "The Business Value
4 of Cisco UCS Integrated Infrastructure for Big Data."

5 So this is their evaluation on the business value to
6 Cisco, and it explains that the cost-effective and
7 operationally efficient nature of Cisco played a substantial
8 role in these organizations' decisions to use Cisco UCS as a
9 big-data platform.

09:49 10 So what both of these documents are showing is that,
11 as a matter of economics, the benefits of the patented
12 technology, the '430 patented architecture which provides a
13 reduction in total cost of ownership and increased
14 efficiencies, that those benefits are drivers and the primary
15 driver for sales and purchases of the UCS products by
16 customers; which, of course, this means that the technology
17 that is claimed in the '430 patent is very important and
18 valuable to Cisco.

19 Q. Did you hear yesterday in court the testimony of Cisco's
09:50 20 Sydney Morgan about Cisco's decision to use UCS to run Cisco's
21 own data centers?

22 A. I did. Mr. Morgan explained that for Cisco's own data
23 centers that they used to operate for their own business, that
24 they chose to use the UCS system; and that one of the main
25 reasons there was the cost efficiency and cost reductions and

1 savings associated with the UCS system.

2 Q. So did use of these added features drive success for
3 Cisco?

4 A. Yes. So just taking it logically, and you can see that
5 the industry recognized the importance of the patented
6 technology. There's many industry accolades associated with
7 it. The benefits are important to the decisions that are made
8 by customers to purchase products, and the result of that is
9 that Cisco experienced exceptional financial performance.

09:51 10 Sales and profits were very significant upon the launch.

11 You can start to see that on slide 27. And on the
12 left, JTX-0141 explains that UCS is changing the industry.
13 Again, a fundamental difference. And that UCS has moved the
14 industry forward by unifying network storage access and
15 virtualization into one cohesive system.

16 MR. BATHCHELDER: Put that on the right, the two years
17 since launching UCS slide.

18 Q. This is a Cisco document, by the way, correct?

19 A. It is. So JTX-0394, that within two years of launch, they
09:52 20 obtained an analyzed run rate of sales of \$1.1 billion, and
21 that this reflected a year-over-year growth of 245 percent, and
22 they had, by this time, already obtained 7,400 customers. And
23 this was just in the first two years.

24 At the bottom you'll see that they had already
25 obtained the number two spot in the United States in terms of

1 market share, which is exceptional.

2 Q. Coming back up to that on the upper right, that \$1.1
3 billion number, what did Mr. Jayakrishnan here say about that
4 number and how it changed over time?

5 A. He explained that as of 2016, the sales had achieved a run
6 rate of \$3.5 billion annually and has hovered around that
7 level, give or take, since that point in time.

8 And I'm going to show you some other data as well on
9 kind of that growth trajectory.

09:53 10 Q. Let's take a look at your next slide, slide 28.

11 What do we see here?

12 A. Clear that off.

13 So these are two documents of research that were
14 performed by investment banks that perform research into the
15 marketplace. The top one, PX-AAP, from Cantor Fitzgerald
16 explaining that, in their view, Cisco's introduction of UCS in
17 2009 has been nothing short of a home run.

18 On the bottom there, William Blair explains in PX-CDH
19 that UCS continues to shine, that it continues to be a great
09:54 20 success story, and that Cisco now holds the number two U.S.
21 market share in server blades, an amazing feat given that the
22 company is a relatively new entrant to the market.

23 And both of these are demonstrating that there was
24 something special about the Cisco UCS system for it to have
25 this much success.

1 Q. Let's take a look at slide 29.

2 What does this document show?

3 A. So this is PX-ABF. This is from ZDNet, and they're having
4 a bit of fun with the UCS acronym, which, as we know, stands
5 for Unified Computing System. They do a play on that saying it
6 is Undisputed Computing Success, recognizing that it is the
7 fastest-growing product in Cisco's history.

8 Q. You cited this document in your report?

9 A. Yes, I did.

09:55 10 MR. BATCHELDER: Your Honor, we mark that as JTX-544.

11 THE COURT: Very well.

12 (Exhibit JTX-544 received into evidence.)

13 BY MR. BATCHELDER:

14 Q. Let's turn to the next slide, slide 30.

15 What does this show?

16 A. So this is a document that was produced and created by
17 Cisco, it's JTX-0142, and it is providing financial metrics of
18 the UCS product system for the years 2012, '13, and '14.

19 Actually, if we could go to the document itself,

09:56 20 probably be a little bit cleaner, I can blow up the left-hand
21 side.

22 So on the left-hand side you'll see that up top the
23 highlighted numbers, 1.3, 2.0, 2.8, those are the sales dollars
24 in billions for the UCS system each of those years. So in
25 2012, UCS obtained \$1.3 billion in sales; in 2013, \$2 billion

1 in sales; and by 2014, it was up to \$2.8 billion in sales.

2 You'll see the red highlighted or circled oval piece
3 that says "45% p.a.," that's 45 percent per annum. What that
4 means is they had sales growth of 45 percent per year.

5 And then on the right-hand side, this is a comparison
6 that Cisco is doing of themselves and the blade server
7 marketplace relative to other industry participants, including
8 HP, Dell, IBM, and Sun. And what it's showing is that the
9 CAGR -- C-A-G-R, which stands for cumulative annual growth
09:57 10 rate -- in terms of market share, Cisco is growing at 19.2
11 percent whereas HP was declining, Dell had a modest uptick of
12 only 3.4 percent, IBM was declining, and the Sun system was
13 substantially declining.

14 So here again, this is showing that Cisco had a
15 product that was outperforming others in the marketplace and
16 those other participants were entrenched into that marketplace
17 with their customer base demonstrating that Cisco was coming in
18 with something new and innovative, which, as we know now, is
19 based upon the patented architecture of the '430 patent.

09:58 20 Q. So coming back to your first cluster of Georgia-Pacific
21 Factors, what does all this evidence we just looked at say
22 about that question?

23 A. It demonstrates that the '430 patented architecture was
24 very important, it was fundamental, a driver of demand, and,
25 thus, would have been considered highly valuable by Cisco at

1 the hypothetical negotiation. They would have been willing and
2 wanting to pay a substantial royalty to have these benefits;
3 and Egenera would be expecting substantial royalty as well.

4 MR. BATCHELDER: Mr. Fitzgerald, can you pull up,
5 please, JTX-59.

6 Q. You've looked at this document, sir?

7 A. I have.

8 Q. What is it?

9 A. This is an email that was sent by Mike Thompson in
09:59 10 December of 2008. At the time Mr. Thompson was the CEO of
11 Egenera, and he is explaining a couple of items.

12 One here up at the top is that he had met recently,
13 the previous week, with Ned Hooper, who was the senior vice
14 president of corporate business development at Cisco. And at
15 this time, what Cisco was conveying and explaining to Egenera
16 is that they had no interest in the server business.

17 And this is, of course, directly contrary to the
18 information that would be available at the hypothetical
19 negotiation. Now, this is just about half a year prior to the
10:00 20 launch of UCS, and there was even sales efforts that were
21 already under way with customers for the UCS system, but, yet,
22 what's being disclosed here to Egenera is not that; but,
23 rather, hiding the fact that they were actually very interested
24 in the server business.

25 Also in this email Mr. Thompson provides a couple of

1 numbers on informal values of the Egenera business. Here you
2 can see, regarding valuation, I am assuming about \$50 million
3 with one buyer. And then it goes on that Morgan, which is a
4 bank, gave us a range of 75 to 100 million a few months ago.

5 And these numbers do not reflect the basic facts of
6 the hypothetical negotiation.

7 At the hypothetical negotiation, the parties and
8 Egenera recognize, believe, and understand that the '430 patent
9 is valid and that that patent is about to be infringed by Cisco
10:01 10 with the sales and launch of the UCS system, which of course
11 would have had a dramatic effect on the value of Egenera.

12 Q. So just coming back to that top portion where the senior
13 vice president of corporate business development, Ned Hooper,
14 tells Mike Thompson at Egenera that Cisco has no interest in
15 the server business, this was said to him when? This is
16 December 2008?

17 A. That's right.

18 Q. So this was three or four months before the announcement
19 of UCS to the world?

10:02 20 A. That's right.

21 Q. So you've told us that at the hypothetical negotiation the
22 parties have their the cards face up on the table; is that
23 right?

24 A. That's right.

25 Q. Is this the way you act when your cards are face up on the

1 table?

2 A. Not at all.

3 Q. Why not?

4 A. This is just strategic gamesmanship, to put it nicely; and
5 it is something that would not be part of the hypothetical
6 negotiation because all of this information would be shared.
7 And so Egenera and Cisco would be sitting at that negotiation,
8 both knowing that the patent is going to be used in the UCS
9 system that is about to be launched.

10:02 10 Q. So a year before this, in December of 2007, what was Cisco
11 doing with respect to one of Egenera's customers?

12 A. They were -- in fact, if we go to slide 32 and JTX-526, so
13 it's just -- so at the bottom left here, you can see -- anyway,
14 four different documents here.

15 Bottom left is JTX-526, and if we could pull that up,
16 it's an email from December of 2007, so this was a year prior
17 to the email from Mike Thompson that I was just referencing.

18 And here this is explaining that at Cisco they had a
19 meeting with a company called Savvis, S-a-v-v-i-s, which was
10:03 20 one of Egenera's very top customers. And they were already
21 beginning to -- that sales process of the UCS system,
22 prelaunch. Sometimes software companies call it selling
23 vaporware; you know, selling a part that has not been fully
24 developed. It's not ready for sales yet, but developing
25 customer interest and doing the presale.

1 And that's what was occurring back in December 2007.

2 And this, too, would have then been known and revealed at the
3 hypothetical negotiation to Egenera.

4 Q. The fact that these meetings between Cisco and Savvis were
5 happening a year before Ned Hooper said, We have no interest in
6 the server business, what does that tell you whether that was
7 true?

8 A. It demonstrates that it was false, that the information
9 being conveyed by Mr. Hooper in December 2018 suggesting that
10:04 10 Cisco had no interest in the server market, that that was
11 false.

12 Q. So those dollar valuations that we just saw in JTX-59, how
13 do they impact a reasonable royalty based on value to Cisco?

14 A. Well, they don't, because they -- the valuation of Egenera
15 inherently on its own cannot reflect the use of Cisco. The
16 reasonable royalty is based upon Cisco's use of the patented
17 technology. The valuation of Egenera does not reflect Cisco's
18 use; in fact, it explicitly does not consider it.

19 Q. And as an economist, if Cisco had said to Mike Thompson in
20 December 2008, We're about to launch an infringing product that
21 infringes the '430 patent to the tune of billions of dollars a
22 year, how would that have affected, economically, an evaluation
23 by Egenera or Morgan Stanley at that time?

24 A. It would have had a dramatic upward effect on the
25 valuation to know that Egenera's '430 patent is agreed to be

1 valid, infringed, and used in the Cisco UCS system that was
2 expected and did become very financially successful.

3 MR. BATCHELDER: Can we turn to slide 31, please,
4 Mr. Fitzgerald.

5 Q. Let's turn to your next cluster of Georgia-Pacific
6 Factors.

7 Competitive relationship, what is this directed to?

8 A. This is evaluating whether there -- what the relationship
9 is between the parties at the hypothetical negotiation and
10:06 10 whether that relationship would be considered competitive such
11 that there could be anticipated harm to Egenera as a result of
12 entering into the agreement.

13 Q. Is competition between the parties required for someone to
14 recover a reasonable royalty as a result of someone else's
15 infringement?

16 A. No. Now, I suppose a very simple example, you can imagine
17 an inventor in the garage tinkering around and they come up
18 with a groundbreaking new invention and technology. That
19 patented technology gives them the right to exclude others from
10:07 20 using that technology, and, thus, just because they haven't
21 commercialized a product, but, rather, are just an inventor in
22 their garage does not mean that they cannot enforce their
23 patent, does not mean that they cannot collect damages, does
24 not mean that they should not be paid for that invention.

25 In fact, it's the very basics of patents are designed

1 to encourage innovation. And, thus, even if you don't have a
2 product, even if you're not being harmed by lost sales, there
3 still is entitlement to a reasonable royalty.

4 Q. So as compared to the tinkerer in the garage that never
5 productizes its patent, does this cluster of Georgia-Pacific
6 Factors 4 and 5, does it punish a company like Egenera that
7 does productize its patent in terms of lowering the reasonable
8 royalty?

9 A. No, there's certainly not a punishment, it's just the
10:08 10 opposite, that as there's been demonstration of the product,
11 the launch of it, although there may be headwinds by -- that
12 were encountered by Egenera, the fact that they had developed
13 the product and were selling it and now were in competition
14 with a company that was competing against it using its very own
15 technology, that only would cause the royalty to be greater
16 than it otherwise would be.

17 Q. Have you formed any conclusions as to the competitive
18 relationship between Cisco's UCS and Egenera's BladeFrame and
19 PAN Manager product?

10:09 20 A. Yes, the economic evidence demonstrates that Egenera and
21 Cisco were direct competitors.

22 Q. Let's take a look at the next slide, please.

23 This is slide 32. What are we looking at here, sir?

24 A. These are just a few documents demonstrating competition.
25 I already talked about JTX-526 at the bottom left.

1 At the top left, JTX-136 is a document that Cisco
2 developed evaluating the competitive nature of the Egenera
3 BladeFrame and PAN Manager system.

4 Similarly, at the bottom right, JTX-393, is a Cisco
5 document exploring the differences between Egenera's BladeFrame
6 and Cisco's UCS architecture.

7 And at the top right is an interesting document, it's
8 JTX-132. And, actually, if we could pull up the document
9 itself.

10:10 10 Okay. So this is a document where the title is
11 "Cisco" -- and this is market research demonstrating that --
12 Cisco to Compete Against Egenera, Rather Than HP or IBM, with
13 Code Name California.

14 And as you'll recall, Project California became UCS.

15 It goes on to say that -- and this was upon there
16 being announcements and discussion of UCS in the marketplace
17 but it had not yet started the sales. This is in March of
18 2009.

19 It says, This will validate the Egenera approach more
10:10 20 than a hundred of case histories.

21 Said another way, the fact that Cisco was adopting the
22 Egenera architecture was viewed as a validation of that
23 architecture.

24 Secondly, here it says that, "The resulting platform
25 is far away from what HP and IBM offer today and much, much

1 closer (actually competing) with the Egenera solution."

2 Q. So they were competitors.

3 A. Correct.

4 Q. Let's look at the next slide, please.

5 A. Here is PX-ADX, and this is a Cisco email scheduling
6 meetings to execute and determine the strategy for competition
7 and what they call competitive takeouts. In other words, being
8 able to go into particular accounts to take customers away from
9 Egenera, amongst others. And that is evidence of competition.

10:12 10 And then on slide 34 is another document. It is
11 PX-AEO, and this is an email that was sent within Cisco, and it
12 explains that they were needing to develop a test plan that
13 positions UCS to shine and Egenera to fall short.

14 And this is showing that they were going to set up a
15 test for a customer to be able to demonstrate, in a rigged
16 fashion, that UCS is better than Egenera, which, again,
17 evidence of direct competition.

18 Q. Can we go back just momentarily to slide 33. It
19 references PX-ADX. You cited that in your report.

10:12 20 A. Yes, I did.

21 MR. BATCHELDER: Your Honor, I'll move that, and that
22 will become JTX-545, please.

23 THE COURT: Very well.

24 (Exhibit JTX-545 received into evidence.)

25 MR. BATCHELDER: All right, let's look at slide 35.

1 | What do we see here?

2 A. This is kind of a culmination. When we're at the
3 hypothetical negotiation between Egenera and Cisco, there would
4 be a recognition and understanding of the competitive
5 relationship. At that negotiation, you can imagine that
6 Egenera is going to look at this as there being -- that
7 BladeFrame PAN Manager system was their only product.

14 Q. So did Cisco, in fact, inflict harm on Egenera in the
15 marketplace with this competition?

16 A. Oh, yes, definitely.

17 Q. You were here for opening statements, correct?

18 A. I was.

19 Q. Okay. And you heard Cisco's lawyer, the great flourish at
10:14 20 the easel, write his bedrock fact number one?

21 | A. I do recall that.

22 Q. I'm going to read it to you, and then I'd like to ask you
23 both whether it's true and whether it matters to your
24 reasonable royalty analysis. Okay?

25 "The Cisco UCS did not cause the BladeFrame to fail.

1 The BladeFrame failed in the market on its own because its
2 design did not work."

3 So first of all, is that true?

4 A. No, it's not. Clearly the evidence demonstrates that
5 Egenera was harmed and its sales were harmed by Cisco's actions
6 in the launch of UCS.

7 Q. And was Cisco's use of the patented architecture the only
8 challenge that Egenera was facing in the market?

9 A. Of course not. I mean, this was also at a time when there
10:15 was the financial crisis affecting banks, which were Egenera's
11 primary customers. There was challenges with Egenera just
12 being a smaller company, and thus not having access and
13 resources to, say, to Microsoft, as well as other situations.
14 But even though there's those headwinds and challenges, that
15 does not mean that Cisco's actions had no effect on Egenera,
16 but, rather, there was clear competition, clear taking away of
17 sales.

18 Beyond the hypothetical negotiation, Egenera
19 continued to compete with Cisco in multiple ways. Egenera was
10:16 continuing to sell their BladeFrame system, they were providing
21 their PAN Manager on an OEM basis to other providers such as
22 Dell and Fujitsu, and they had services that they were
23 continuing to provide for their customer base. And the
24 documents that are after the hypothetical negotiation
25 demonstrate that there was continuing competition there.

1 Q. And harm?

2 A. Yes, and harm.

3 Q. All right. So we talked about whether when Cisco's
4 counsel told the jury it was true, now let's turn to whether it
5 matters. Does it matter to a reasonable royalty calculation
6 under 35 USC Section 284, the patent code provision you showed
7 the jury at the outset?

8 A. No, it doesn't. And perhaps the easiest way to recognize
9 that is going back to the garage tinkerer, the person that
10:17 10 develops a groundbreaking invention in their garage. They do
11 not have to show competition, they do not have to show that
12 they've been harmed in sales in order to have a patent that
13 they can enforce to obtain a reasonable royalty.

14 The reasonable royalty does not require there to be
15 harm to the patent holder in order to get proper compensation.

16 Now, that's not to say that the competitive
17 relationship and that heated competition and the potential harm
18 that Egenera is going to face, that the parties would recognize
19 that at the hypothetical negotiation; it would be a
10:17 20 consideration, it would cause the ultimate reasonable royalty
21 to be higher than it otherwise would, but it's not a
22 requirement in order to be entitled to a reasonable royalty.

23 Q. So if the focus of the reasonable royalty calculation
24 isn't on harm to Egenera, what is it? What's the focus?

25 A. It's based on Cisco's use. That's what the statute

1 provides, that a reasonable royalty is for the use made of the
2 invention by the infringer, which in this case is Cisco.

3 Q. Let's turn to slide 36, please, to your next question, the
4 Georgia-Pacific Factors.

5 Can you go back to 36, please.

6 This is the license structure, 3, 7, and 11. What is
7 this about?

8 A. License structure refers to the financial terms of the
9 agreement that would result from the hypothetical negotiation
10:18 10 in terms of the duration of the license agreement, whether it's
11 exclusive or nonexclusive, and the structure of the royalty.

12 Q. So what is the duration?

13 A. Here the license would begin at the hypothetical
14 negotiation in July of 2009 and would go certainly through the
15 sales data that were produced up through February of 2022, and
16 then really would continue beyond that through to patent
17 expiration in May of 2024. Recognizing, again, that the
18 damages period begins in 2016, August 2016.

19 Q. Would that license have been exclusive or nonexclusive?

10:19 20 A. Nonexclusive. And by being nonexclusive, that means that
21 Egenera could continue to utilize the technology and that they
22 would be able to have the benefits of the technology in the
23 marketplace; and, thus, the royalty that I have calculated does
24 not include any value associated with exclusivity by Cisco,
25 which would allow Cisco to be the only one to use the

1 technology in the industry.

2 Q. All right. Now let's move to your next slide, 37.

3 What is this depicting?

4 A. It's just reiterating that the appropriate royalty
5 structure that the parties would agree to is one that reflects
6 the extent of use of the patented technology by Cisco in their
7 UCS systems. Again, the statute states that the reasonable
8 royalty is for the use made of the invention by the infringer,
9 which in this case is Cisco.

10:20 10 Q. Let's turn to the next slide, please.

11 A. So here on slide 38, in my view, the best way to
12 accomplish this is through what is known as a running royalty.
13 Running royalties are typically either a percentage of revenue,
14 percentage of the sales price or a per-unit royalty. And the
15 notion is that as sales increase, that the royalty would
16 increase; if sales decline, then the royalty would be lower;
17 that the two go in lockstep together.

18 And this makes a lot of sense, not only with respect
19 to the statute that looks to the reasonable royalty being based
10:21 20 upon Cisco's use, but if you put yourself in the shoes of
21 Egenera and Cisco at the hypothetical negotiation, they would
22 want a royalty that reflects the actual value contribution,
23 whether the product is super successful or less so.

24 Q. And did you also consider using something called a
25 lump-sum infrastructure instead of a running royalty?

1 A. I did give that consideration. You know, ultimately,
2 what's important is the overall amount of the royalty, not just
3 the structure, but the amount, because that's what is based
4 upon Cisco's use.

5 There are situations that -- where parties do agree to
6 a lump sum in actual license agreements; and a lump sum is just
7 a single, fixed payment.

8 And what I'm depicting here is this hypothetical
9 negotiation with the black box in the middle, and the black box
10:22 10 is intended to represent all the information that isn't known,
11 it's hidden in this black box; and it also reflects a barrier
12 between the parties in terms of their negotiation.

13 So oftentimes we'll see situations where what the
14 technology provides and is, is not known, not articulated; its
15 use and the extent of use, what products use it, over what time
16 periods, that's unknown; that the success of the products is
17 not known, the success of the technology is not known; where
18 the parties are withholding information, confidential
19 information, where they put their cards close to their chest
20 versus the hypothetical negotiation where the information is
21 put out for everybody to see.

22 Oftentimes there are agreements with cross-licenses,
23 where consideration, kind of like the payment is being made in
24 the form not just of money, but in terms of patent licenses for
25 both entities' patents going both directions.

1 And importantly is dispute over whether the patent is
2 valid and infringed, which, again, we don't have at the
3 hypothetical negotiation.

4 And because of that, in my view, a lump sum is a less
5 likely outcome in this hypothetical negotiation between Egenera
6 and Cisco.

7 Q. Have you ever used a lump sum yourself?

8 A. Oh, of course. There are situations where it makes sense
9 to structure a royalty as a lump sum, again, so long as it is
10:24 10 based upon the actual use of the technology and how that's
11 anticipated.

12 Q. All right. So back to your damages calculation here.

13 Did you use a running royalty to determine a
14 reasonable royalty in this case?

15 A. So here on slide 40 is -- the same slide I was showing you
16 earlier, and this is the formula of number of servers used in
17 an infringing system multiplied by the royalty per server to
18 get to the reasonable royalty.

19 So what I'm going to do is first talk through how to
10:24 20 get to the black box here up top on number of servers and then
21 go through to the green box on the royalty per server to get to
22 the answer.

23 Q. All right. Let's go to the next slide.

24 What do you show here?

25 A. I, as an economist, did not determine what products

1 infringe and which ones do not. That is -- was up to
2 Professor Jones to make that determination.

3 I learned from him that the infringing products are --
4 is the UCS system which includes architectures that use
5 B-series blade servers and C-series rack servers in particular
6 configurations. And, thus, I used the number of servers in
7 those infringing systems to calculate the royalty.

8 Q. Did you use every single B-series server and every single
9 C-series server in your analysis?

10:25 10 A. No, not at all.

11 On slide 42 I explain that I take the sales data from
12 Cisco, I exclude non-U.S. sales. I exclude sales that are made
13 to the United States government. I exclude sales with zero
14 revenue. I excluded sales with servers that were used with UCS
15 mini and the UCS mini configuration. I excluded hyperflex
16 servers, I excluded storage servers, and I excluded servers
17 that were used without UCS Manager. So I made those reductions
18 in determining the number of servers used in infringing UCS
19 systems.

10:26 20 Q. Okay. So after all that, what did you determine the
21 royalty base to be?

22 A. On slide 43 I explain that the number of servers in
23 infringing UCS systems is 353,496 servers. This is for the
24 damages period from August 5, 2016 to February 28, 2022.

25 I have a bunch of depictions of blue servers on this

1 slide, each one is intended to represent 1,000 servers so you
2 can get an idea of the magnitude of the sales of the infringing
3 systems.

4 Q. So each of these is a thousand?

5 A. That's right.

6 Q. That's a lot of infringement.

7 A. It was a lot of servers that were infringing, yes.

8 Q. How do you know that your number here, 353,496, is the
9 right number of servers?

10:27 10 A. I base this on a tabulation of the sales data that was
11 produced by Cisco in this litigation.

12 On slide 44 I'm listing now documents, there is 31 of
13 them ranging from JTX-0397 to JTX-0403; and then JTX-0418 to
14 JTX-0431; and the range from JTX-0439 to JTX-0448.

15 Q. All right. Let's turn to slide 45.

16 You've now -- we've filled in that black box on the
17 top, the number of servers you just showed us.

18 How do we get to the green box?

19 A. It takes some effort. There's a lot of work that I did.
20 So I -- it's going to take us a little bit to get through it,
21 but, effectively, I'm looking at other potential license
22 agreements to see if they might be informative and other
23 transactions that I might be able to utilize to determine the
24 answer.

25 Q. All right. Let's turn to slide 46.

1 You mentioned licensing, and that's your next cluster
2 of Georgia-Pacific Factors. What are we looking at here?

3 A. Sometimes in some situations other patent license
4 agreements that have been entered into by either party, both
5 parties or even another party might be informative for
6 determining a reasonable royalty.

7 As I'm going to show here, there are no such
8 informative agreements that we can rely upon.

9 Q. Let's look at slide 47.

10:29 10 You first focused on Egenera's past agreements?

11 A. I did. There's a couple of agreements that Egenera
12 entered into, they are not for the '430 patent. The technology
13 is not considered comparable. It was not for Cisco's use of
14 patented technology, which is the basis for the reasonable
15 royalty; but, rather, looking at Egenera's use potentially of
16 technology. And they were related to litigation, which
17 reflects particular compromises that would not be present at
18 the hypothetical negotiation, and, thus, these agreements are
19 not informative.

10:29 20 Q. All right. Let's look at the next slide where you
21 examined Cisco's license agreements. What did you find there?

22 A. So here on slide 48, Cisco produced approximately 25
23 different agreements that they had entered into. None of those
24 agreements are for comparable technology. There is not any
25 known use of the technology by Cisco underlying those

1 agreements, no information surrounding what products might or
2 might not use the technology, what the technology really
3 encompasses, and how that technology might have been used. So
4 there's no known use.

5 Many of the agreements are cross-licensed, and, thus,
6 there's not an ability to be able to unpack the agreement to be
7 able to determine how much is actually payable for any
8 particular patents within those agreements.

9 And some of the agreements are based upon litigation
10:30 10 settlements that again reflect a compromise and recognition of
11 particular litigation costs that would not be present at the
12 hypothetical negotiation, and, thus, these agreements are not
13 informative.

14 Q. Is there any disagreement about that point?

15 A. No. Cisco's damages expert agrees with me that these are
16 not comparable agreements and informative.

17 Q. Let's go to the next slide, slide 49.

18 This is an excerpt from the interrogatory response
19 that my colleague read in this morning. Why does it matter
10:31 20 here?

21 A. This is Cisco recognizing that the agreements that they
22 produced in this litigation, that could be considered at the
23 hypothetical negotiation, that they do not concede that any
24 agreement directly relates to any of the accused products,
25 individually or as a whole. And it's just another way for

1 demonstrating that Cisco does not believe the agreements to be
2 comparable.

3 Q. Did you consider how Cisco itself determines how much to
4 pay for patent licenses?

5 A. I did. On slide 50, I am highlighting some of the
6 testimony that we heard this morning from Dan Lang, who was
7 Cisco's vice president of intellectual property.

8 It's interesting because he says that there's a number
9 of factors that Cisco considers in determining how much to pay
10:32 10 for a license, a patent license. The first two that I've
11 listed here, the likelihood of infringement of the patent; and
12 the likelihood of validity, whether the patent is valid.

13 Those two items are not issues at the hypothetical
14 negotiation because, of course, under the law, I have to assume
15 that the patent is valid and infringed.

16 The other items here: The strength of the patent, I
17 addressed with the importance of the patent and its
18 contributions, discussed that earlier; same with the
19 incremental value of the patent; and then how much value the
10:32 20 patent adds to Cisco's product.

21 I've explained the basis for that already, and I'm
22 going to quantify that for you here as we proceed.

23 Q. All right. Let's turn to your next Georgia-Pacific
24 cluster. Looking at slide 51, please.

25 Contribution to Cisco, what is this?

1 A. This really gets to the heart of the quantitative analysis
2 that I performed.

3 In effect, what I did is I looked at the transaction
4 between Nuova and Cisco. Nuova was the company by which Cisco
5 did a spin-out back in 2005-'6 time period, and then they
6 purchased Nuova in 2008. And part of that acquisition involved
7 the UCS, the Unified Computing System. And I used that
8 transaction to calibrate what Cisco would pay for the patented
9 technology, and I do so in multiple steps.

10:34 10 Q. What is that Nuova acquisition? Would you elaborate a
11 bit?

12 A. So in the 2005-2006 time period, Cisco performed a
13 spin-out. That means their executives, some of them left
14 Cisco, started a company called Nuova. This company received
15 an investment from Cisco of \$70 million. Nuova then developed
16 the UCS system, along with another product referred to as the
17 switch, the Nexus switch. And then in 2008, there was a
18 spin-in, and that's where Cisco then acquired Nuova with
19 payments totaling another \$677,500,000, and brought UCS and the
10:35 20 Nexus switch into Cisco, which then they launch UCS in July
21 2009.

22 Q. So, overall, how much did Cisco pay for the Nuova
23 acquisition?

24 A. It was a total amount of \$747,500,000.

25 MR. BATCHELDER: Mr. Fitzgerald, please, can we pull

1 up, please, JTX-391. And can we turn to page 11.

2 A. Page 2.

3 Q. Go ahead, please.

4 A. Sorry. So here on page 2 of the document is a summary of
5 the Nuova acquisition, kind of sets forth the basic facts of
6 it.

7 You can see up top for the deal terms that the total
8 cash consideration was approximately \$748 million, and this was
9 a combination of a \$70 million initial investment plus there
10:35 10 was a performance-based earn-out with potential to reach \$678
11 million. I'm going to describe that in more detail in a
12 minute, but, in effect, those were based upon the revenue and
13 profit performance of the company and the business; and all of
14 those monies were ultimately paid.

15 The acquisition was announced in April of 2008 and
16 then closed May 2008.

17 And as you can see a little further down, the deal
18 rationale, that the acquisition of Nuova supports Cisco's data
19 center 3.0 vision in the blade server market transition.

10:36 20 And that the benefits are that it creates data center
21 relevance for Cisco, and it provided both the Nexus switch
22 product and the UCS server system. So it was those two sets of
23 products; the switch launched into the marketplace before the
24 server.

25 MR. BATCHELDER: Mr. Fitzgerald, can you please pull

1 up JTX-389.

2 Q. So here let's look at page 11.

3 A. Yes, so document 11. So this is the merger agreement
4 between Cisco and Nuova.

5 Here on this page you'll start to see the definitions
6 of what they call the earn-out amounts. Again, this is based
7 upon, then, the subsequent performance of revenue and
8 profitability for the business lines that Cisco was acquiring
9 in the Nuova purchase.

10:37 10 On the next page you'll see that -- also the
11 definition for another third earn-out payment, and at the
12 bottom is the recognition that the total amount that would be
13 payable for the acquisition would not exceed \$677,500,000.

14 So this was the amount that ultimately was paid for
15 the cash flows that were generated by Nuova.

16 Q. So how did you make use of this Nuova acquisition in
17 determining a reasonable royalty here?

18 A. So if we go to slide 52, we know that Cisco paid this
19 \$747,500,000 for Nuova, and in effect, they were paying for the
10:38 20 cash flows of that company. Cash flows sometimes are thought
21 of as similar to profits. It's the total amount of free cash
22 that is available to the owner after all the costs are paid and
23 making sure they have enough working capital in the business.
24 So this is the amount of cash that can be taken out of the
25 business. I'm going to explain that more.

1 So there's really two steps that I take. The first is
2 to determine what would Cisco pay for UCS revenues, okay. So
3 if you compare the top thing here to number one, there's two
4 differences, one is Nuova cash flows, the other is UCS
5 revenues.

6 And I'm going to be drawing a comparison or a parallel
7 between Nuova and UCS, and I'm going to do a conversion from
8 cash flows to revenues so that we can convert this, ultimately,
9 into a royalty.

10:39 10 Now, it's important to recognize that I'm using the
11 Nuova transaction as a parallel to calibrate the relationship
12 that -- between what Cisco pays to what they get in cash flows
13 for businesses that are related to, ultimately, the patented
14 technology.

15 I am not taking the \$748 million, roughly, and
16 whittling that down to determine the value that they would pay,
17 but, rather, using it as a comparator, using the Nuova
18 transaction to calibrate ultimately what the royalty would be.

19 And the second step is then taking that payment amount
10:40 20 and apportioning that down to the technology claimed in the
21 '430 patent specifically.

22 Q. Okay. So the way that you're using this Nuova
23 acquisition, have you seen any documents in this case that
24 support your doing so?

25 A. Yes. There was a press release that was issued by Cisco

1 around this time.

2 MR. BATCHELDER: Pull up JTX-396, please.

3 A. So this is upon the announcement of the acquisition by
4 Cisco, a press release that was put forward by Cisco
5 referencing a quote made by John Chambers, who at the time was
6 the CEO of Cisco, explaining the significance of the
7 acquisition. It was Cisco's 126th acquisition at that time.

8 And what it states here towards the bottom is that a
9 spin-in allows Cisco to tie an acquisition price to product
10:41 10 revenues and the margins associated with those revenues. And
11 that this results-oriented approach avoids the typical
12 challenges of estimating the value of an acquisition.

13 So this is Cisco demonstrating and explaining that the
14 way I use the Nuova transaction to determine a reasonable
15 royalty is the very same way that Cisco approaches determining
16 the value of an acquisition as it relates to revenues and
17 profits.

18 Q. Let's come back to the first in two steps you mentioned a
19 moment ago.

10:41 20 Can we get slide 53, please.

21 So based on Cisco's payments for Nuova, which was that
22 \$747,500,000 figure, how do you determine what Cisco would be
23 willing to pay for UCS revenues?

24 A. So on the left, I'm showing that there's -- we have two
25 pieces of information from the Nuova transaction, the payment

1 of roughly \$748 million, and there are cash flows that were
2 expected to arise from that transaction of \$1,067,000,000. I'm
3 going to show where that comes from here in just a moment, but
4 it's that ratio that's roughly 70 percent, when you take the
5 748 divided by the 1,067. That ratio I then apply over on the
6 right-hand side when we're thinking about UCS, where I'm going
7 to first determine the revenue on a per-server basis, that will
8 be the teal box at the bottom right; and once I have that, I
9 can then figure out the payment, because I can use the very
10:43 10 same relationship.

11 And again, you're going to notice at the bottom on
12 the left is cash flow, on the right is revenue. And so I'm
13 going to be making a translation there using a little bit of
14 data and algebra, just a little arithmetic to make that work.

15 Q. So focusing on that \$1.067 billion figure on the lower
16 left.

17 MR. BATCHELDER: Let's look at JTX-54, Mr. Fitzgerald.

18 Q. What is this document?

19 A. This is a really neat document that shows the financial
10:43 20 analysis that was performed by Cisco for the Nuova transaction.

21 And if we zoom in on the right-hand side for this
22 base-case DCF analysis -- so "DCF" stands for discounted cash
23 flow -- and this breaks down their analysis from 2008 through
24 2013 for the different products: the server revenue, you got
25 switch revenue, we have services that go with it; so this is

1 the businesses for both the UCS and the Nexus switch. Then
2 after 2013, they just put this out into perpetuity.

3 What I would highlight is that you'll see there's a
4 row for present value cash flows, PV cash flows, towards the
5 bottom.

6 And over at the far right you'll see a total for
7 1,067, that's \$1,067,000,000; so that's where the overall cash
8 flow amount on a present value basis that I obtain for that
9 1,067,000,000.

10:44 10 Q. Let's go back to our slide 53.

11 So now how do we figure out the right-hand side?

12 A. So the first step of that is to look at the revenue
13 associated with UCS.

14 Now, keep in mind the first step is looking at how
15 much they would pay for corresponding UCS cash flows and then
16 converting that to revenue.

17 So let's start with looking at revenue, which you can
18 see on slide 54.

19 So what I am showing here is that for UCS systems,
10:45 20 based upon Cisco's sales data, that they were earning in
21 revenue \$14,254 per server. So that's taking the revenue for
22 the systems and dividing by the number of servers in those
23 systems to get the \$14,254.

24 Q. What products were included?

25 A. So these are all of the UCS products, because at this

1 stage of the analysis I need to do an apples-to-apples
2 comparison between the Nuova transaction that included UCS
3 revenues and then drilling down to UCS.

4 I then make -- you'll see that I apply the overall
5 royalty just to servers used in infringing UCS configurations
6 for United States sales.

7 Q. Let's look at slide 55.

8 What have you done here?

9 A. Well, I've added a box that is salmon or coral-colored.
10:46 10 This is the payment share. So the Nuova transaction gives us
11 the payment relative to cash flows, as I showed you. So what I
12 now need to figure out is what share of this \$14,254 would
13 Cisco pay for the UCS systems? And you'll see on the next
14 slide that I have determined that amount to be 13.3 percent,
15 and I'm going to show you how I get that.

16 Q. Please do.

17 A. So on the next slide, 57, the 13.3 percent, that payment
18 share is based upon two pieces of data: The first, the payment
19 for cash flow; and the second, the cash flow to revenue.

10:47 20 So you'll recall that we already know the ratio or the
21 relationship for the payment for cash flow, that's the first
22 black box with the question mark. But because we're looking at
23 the \$14,254, which is a revenue number -- cash flow is smaller,
24 right, because -- it's even smaller than profit -- that I need
25 to make a translation to revenue. And so I'm going to do that

1 in two steps.

2 On slide 58 you'll see that the payment for cash flow,
3 that relationship is 70.1 percent. And I alluded to that
4 earlier.

5 Could we go back to slide 53?

6 So here you'll recall on the left that the payment was
7 \$747,500,000, the cash flow of \$1,067,000,000, that ratio of
8 those two, or the fraction, is 70.1 percent. And that's what's
9 on slide 58, that's where those data come from.

10:48 10 Q. All right. What do you do next?

11 A. Then I have to figure out the far right box, the cash flow
12 to revenue translation, and that's on slide 59, where I provide
13 that the answer is 19 percent.

14 And the way to think about this, for those of you who
15 have enjoyed math and science, where when you're either
16 cancelling out units or cancelling out the numerator and
17 denominator as you're doing arithmetic, that's what I'm doing
18 here.

19 And the 19 percent comes from that same cash flow
10:49 20 document that we were looking at earlier.

21 Q. This is JTX-54.

22 MR. BATCHELDER: Can we see that again,
23 Mr. Fitzgerald, on page 11.

24 Q. Is this that document?

25 A. Yes, it is.

1 And so what I did is I calculated 19 percent from the
2 year 2013. And you'll see that in that year for that snapshot,
3 the free cash flow is 190, that means \$190 million, as compared
4 to the total revenue, which here it shows as 1,000, and that's
5 reflective of \$1 billion.

6 So what this is saying is that the ratio between
7 revenue and free cash flow is 19 percent, the 190 divided by a
8 thousand, or 190 million divided by 1 billion.

9 THE COURT: I'm sorry to interrupt. Finish that
10:50 10 thought, and then I think we'll take the break. My watch is
11 telling me it's time to stand up, so I think it's reminding me
12 that the break is due.

13 So go ahead. Finish your thought.

14 THE WITNESS: Sure, thank you.

15 A. So one thing to note here is I use the year 2013 as the
16 calibration year, and there's good reason for this. Because
17 the agreement between Cisco and Egenera would be going out
18 across a significant period of time -- in fact, the damages
19 period does not even begin until 2016 -- wanted a relative more
10:51 20 mature year than just the startup phase.

21 Another thing to note here is that the server revenue
22 across the top, you'll see in 2013 that's showing \$397 million,
23 and you'll recall from the document that I was showing you
24 earlier that by 2013 -- this was a financial document that
25 showed it was already at \$2 billion in actuality.

1 So this was a very conservative cash flow analysis
2 that was being performed.

3 I would also note, very briefly, that you can see that
4 the server revenue takes longer to ramp up than the switch
5 revenue, and -- but, yet, it keeps going, it's accelerating its
6 growth; whereas the switch revenue by that point in time had
7 peaked in terms of the analysis that was being conducted and
8 the expectation going into this. And that helps really show
9 the importance of the server in the financial analysis; and
10:52 10 then, of course, going forward in the real world, the
11 performance was exceptional.

12 THE COURT: All right. Jurors, let's take the
13 25-minute morning recess, and we'll come back and finish this
14 analysis.

15 THE CLERK: All rise.

16 (Recess taken.)

17 THE CLERK: All rise for the jury.

18 (Jury and court enter.)

19 THE CLERK: Resuming on the record, Civil Action
11:19 20 16-11613 Egenera versus Cisco. Thank you. You may be seated.

21 DR. RYAN SULLIVAN RESUMES THE STAND

22 THE COURT: All right. I think we are ready to
23 resume.

24 MR. BATCHELDER: Thank you, your Honor. May I
25 proceed?

1 THE COURT: You may.

2 **DIRECT EXAMINATION, resumed**

3 BY MR. BATCHELDER:

4 Q. Dr. Sullivan, we left off on slide 59, and you had just
5 filled in the box on the right, that 19 percent cashflow; do
6 you see that?

7 A. I do.

8 Q. Who gets that in your analysis?

9 A. That goes to Cisco.

11:20 10 Q. Is that a good return, bad return?

11 A. It is a very good return because this is based upon free
12 cashflow, which as I mentioned is even smaller and lower than
13 profit, and so this allows Cisco to have a very significant
14 return on -- after paying -- what I'll show you, making this
15 payment as well as making the royalty.

16 Q. Let's turn to slide 60. What are we looking at here?

17 A. So this is where I apply the 13.3 percent payment share.
18 So I apply -- I use the revenue per server of \$14,254. I apply
19 the payment share of 13.3 percent. That math yields a payment
11:21 20 per server of \$1,897, and so this is the payment that is
21 reflective of how much Cisco would pay relative to the UCS
22 system, and then my next step is to apportion that down based
23 upon the specific contributions of the '430 patent.

24 Q. How do you do that apportionment?

25 A. On the next slide, 61, I have represented this payment per

1 server of \$1,897 as a big blue pie, and in effect, I split that
2 using quantitative data between the contributions of the
3 claimed technology and the '430 patent, separate and apart from
4 other contributions to that amount.

5 And on slide 62, the next slide, there it is. I, you'll see
6 that I split this, where 55.3 percent of that amount is
7 attributable to the '430 patent and the technology claimed in
8 there, and the benefits that are derived from it, and the
9 remainder is attributable to other features, functionalities,
11:22 10 and contributions.

11 Q. How did you come up with that 55.3 percent number?

12 A. If we go to slide 63, based upon the work that was
13 performed by Dr. Jones, he had identified that there are two
14 pieces of cost savings that are fully attributable to the
15 technology claimed in the '430 patent, and that includes
16 provisioning and administration, and systems management. And
17 those are what are on the right here.

18 On the left-hand side are other components that deliver to
19 reduced cost and reduced total cost of ownership. That
11:23 20 includes server hardware and warranty, power and cooling, and
21 switching warranty and cabling. And there are some
22 contributions that the '430 patent is making to the left-hand
23 side; you can think of that as cabling. We saw pictures of
24 crazy amounts of cables reducing to very few. But in terms of
25 what is solely attributable to the technology claimed in the

1 '430, that's on the right-hand side; the systems management,
2 the provisioning and administration.

3 I looked at 15 different case studies that Cisco conducted
4 based upon actual implementations of the UCS system with
5 customers, and in those case studies, they determined the cost
6 savings that were attributable to each of these categories, and
7 thus, I used that data to determine the 55.3 percent.

8 Q. So looking at that power and cooling slice on the lower
9 left, remember yesterday Cisco's lawyer took a fan out of the
11:24 10 UCS server and waved it around, and in your analysis, what
11 happens to that fan?

12 A. That -- and the value of that all stays with Cisco. That
13 is not part of the royalty. Because that's on the left-hand
14 side here, that's not being attributed to the patented
15 technology. So this is a way in which I separate out the
16 contributions of the patented technology from other
17 contributions.

18 Q. So how do you make use of that 55.3 percent number in your
19 reasonable royalty determination?

11:24 20 A. Well, we're getting very close now to that green box that
21 I told you we were going to get to. So on slide 64, the next
22 one, it is simple mathematics of multiplying the \$1,897 of the
23 payment per server by 55.3 percent, and that number is \$1,050.
24 As I mentioned more precisely, it's \$1,049.67 and other
25 trailing digits. And it's that precise number that I apply,

1 but ultimately, I have determined that the appropriate royalty
2 per server is this approximately \$1,050.

3 Q. Let's look at slide 65. What are you showing here?

4 A. There are multiple pieces of apportionment that I have
5 implemented, starting with a revenue per server of \$14,254.
6 First utilizing the Nuova transaction as a comparator to
7 calibrate the payment, I have in that step isolated for costs
8 and profitability. In other words, I have separated out
9 revenue from cost, and thus been able to apportion down just to
11:26 10 the benefits that Cisco would receive recognizing a healthy
11 rate of return. And then I also do a technological
12 apportionment that applies specifically to get us to the
13 patented technology from the '430 patent.

14 Q. So now that we have our royalty per server number, where
15 do we go next?

16 A. This is what provides ultimately the answer. So if we go
17 to slide 67, which is the culmination of the hypothetical
18 negotiation, you know, we now have the two primary components
19 that feed into the calculation; the number of servers used in
11:26 20 infringing UCS systems of 353,496, and again, that amount of
21 servers are only the servers that are sold for United States
22 sales in infringing configurations. And then I apply the
23 royalty per server of approximately \$1,050, and as I noted up
24 front in my testimony, on slide 68 is the ultimate amount of
25 the reasonable royalty of \$371,056,482. And that is for the

1 damages period that goes from August 5, 2016 through
2 February 28 of this year, 2022.

3 Q. Just so the jury is crystal clear on this, in your opinion
4 as an expert economist, is that number in the blue box,
5 \$371,056,482, is that a reasonable royalty in this case based
6 on all the evidence you've considered?

7 A. It is. It is a substantial amount of royalties, but it
8 reflects really two items; the breakthrough technology that was
9 patented in the '430 patent, that architecture, combined with
11:28 10 the use by Cisco that achieved very significant financial
11 performance, and thus, in my view, this is reasonable to both
12 parties.

13 In fact, on the next slide, on 69, there is a couple of items
14 to keep in mind here. The way this royalty is structured is
15 such that Cisco keeps more than 92 percent of the revenues,
16 even after paying the royalty, and they get to maintain more
17 than 61 percent of the profits, and in fact, since that's
18 really based upon the cashflow, thinking about that 19 percent,
19 it's more than 61 percent in profits, and that's just based
11:29 20 upon what was articulated in that cashflow analysis, the DCF
21 analysis that was conducted. The actual performance far
22 outstripped that financial analysis such that the profits for
23 Cisco were much greater. By using a running royalty on a per
24 server basis, this would be a highly profit-enhancing agreement
25 and endeavor for Cisco to enter into. They would be very

1 interested in paying a royalty of this magnitude in order to
2 enjoy far greater financial benefits than would accrue.

3 Q. Good deal or bad deal for a patent infringer?

4 A. Very good deal.

5 MR. BATCHELDER: Your Honor, I pass the witness.

6 THE COURT: All right. Cross-examination?

7 CROSS-EXAMINATION

8 BY MR. McDAVIT:

9 Q. Dr. Sullivan, I just have some binders for you.

11:31 10 So Dr. Sullivan, one of the first things you did -- can I get a
11 document camera, please?

12 Before we start, I just -- you know, one of the first things
13 you showed us was your PDX-13 slide 18, and you showed this
14 from an email, right? Do you remember that?

15 A. That was on slide 18, that's right.

16 Q. So I just want to look at the whole email and see what we
17 didn't show the jury. Okay?

18 A. Sure.

19 Q. So in 2013, there's some sales guy who's asking -- this is
11:32 20 2013, right, so this is after the hypothetical negotiation,
21 right?

22 A. It is.

23 Q. Okay. And then, so there's some sales guy who is saying
24 here, he's asking a question, "Are we seeing any Egenera on
25 UCS, or better yet, ways to displace them," do you see that?

1 A. I do. I cite that in my report as evidence of
2 competition.

3 Q. And then another sales guy, right, at Cisco says -- he is
4 responding and he says, "Toby, there must be over 1740
5 different ways to displace Egenera. The only people that know
6 about the Egenera -- and this is a new product they have -- are
7 the employees at Egenera and maybe Emory."

8 Do you see that?

9 A. I do.

11:32 10 Q. Right. And then Jason Shaw, the part that you showed us,
11 right, he says, "You know what, I don't know about that claim.
12 Egenera is wicked cool."

13 That's where this comes from, right?

14 A. That's right. And then it goes on with the "cool but weak
15 because everybody is now at Cisco."

16 Q. Right. Right.

17 A. It's a colorful email.

18 Q. It's a colorful email, right. And you didn't show the
19 entire email to the jury, did you?

11:33 20 A. No. Ironically, I was actually thinking about it but, you
21 know, we have limited time, so I --

22 Q. This is JTX-543.

23 Now, you told us that you received degrees in economics, right?

24 A. That's right.

25 Q. You're not an engineer, correct?

1 A. Correct.

2 Q. You're not a computer scientist, correct?

3 A. That's right.

4 Q. You're not an expert in the operation of data centers,
5 correct?

6 A. No, I am not.

7 Q. You're not an expert in the operation of servers, are you?

8 A. No, I'm not.

9 Q. Okay. Now, we heard about -- we heard Dr. Jones talk
11:33 10 about a person of ordinary skill in the art. You don't
11 consider yourself a person of ordinary skill in the art, right?

12 A. No, I'm not.

13 Q. Now, you relied on Dr. Jones to form your opinions in this
14 case, right?

15 A. I did. I reviewed his work.

16 Q. And specifically, you relied on Dr. Jones to identify what
17 does and what doesn't infringe with the UCS, right?

18 A. That's right.

19 Q. Okay. When you formed your damages opinions in this case,
11:34 20 you did not speak to a single person at Egenera to form your
21 opinions, correct?

22 A. That's right.

23 Q. Okay. And you didn't speak to a single inventor of the
24 '430 patent to help form your opinions, right?

25 A. That is correct.

1 Q. Okay. Now, for the purpose of your analysis, and I think
2 you told us this, you assume that the '430 patent, the asserted
3 claims of the '430 patent, right, because we're only talking
4 about two claims?

5 A. Claims 3 and 7.

6 Q. Right. And you assumed those claims are valid, right?

7 A. That's right. That's part of a damages expert's exercise
8 and task.

9 Q. And you assumed that those claims are infringed, right?

11:35 10 A. That's right.

11 Q. You make those assumptions, but you don't know that the,
12 the asserted claims of the '430 patent are actually valid or
13 actually infringed, right?

14 A. That's correct. It's part of the construct or the
15 framework for determining a reasonable royalty.

16 Q. And you know, don't you, that if the asserted claims are
17 not infringed, there are no damages, right?

18 A. If there's an ultimate determination in that regard, that
19 would be my understanding.

11:35 20 Q. And you know, don't you, that if the asserted claims are
21 found to be invalid, there's no damages, right?

22 A. Again, if there is an ultimate finding in that regard,
23 that would be my understanding.

24 Q. So you agree with me, right, that there's no damages if
25 the claims are invalid, right?

1 A. I would put it the way I did, which I think is more
2 accurate.

3 Q. Okay. So you figured out reasonable royalties based on, I
4 think you told us, Cisco's acquisition of Nuova, right?

5 A. I did use that transaction as a comparator.

6 Q. Now, you've shown us some documents, and I think you told
7 us that, during direct, that you know, at the time Cisco
8 acquired Nuova, it had two product lines, right?

9 A. That's right. It was the switch and the server. So the
11:36 10 UCS and the Nexus Switch.

11 Q. Right. So just so we're all clear, the "Switch" is the
12 Nexus, sometimes referred to as the Nexus 5000 Switch, right?

13 A. That's right. That's what I was referencing earlier.

14 Q. And the server is UCS, right?

15 A. That's right.

16 Q. And that's what we're talking about in this case, right,
17 is UCS?

18 A. Yes. I also talked about the Nexus Switch. For example,
19 we were looking at JTX-54 and breaking that down.

11:36 20 Q. The Nexus Switch isn't accused of being covered by the
21 asserted claims, right?

22 A. That's right.

23 Q. And you didn't hear Dr. Jones talk about the Nexus Switch
24 as being covered by the asserted claims, right?

25 A. That's correct.

1 Q. Right. Okay. So it's two different product lines. One
2 is being asserted to being covered by the asserted claims and
3 one is not, correct?

4 A. That's right.

5 Q. So you calculated that the total cost by Cisco to acquire
6 Nuova, which has the two product lines, equals \$747 million,
7 right?

8 A. \$747,500,000.

9 Q. Okay. So let's look at one of the documents that you

11:37 10 think was really neat, I think is what you said.

11 This is JTX-54. Right? I think you said you liked this one,
12 right, this Nuova Systems Terms and Conditions from March 8,
13 2007?

14 A. Well, as an economist, this is the type of document we
15 geek out on.

16 Q. Right.

17 A. It is. It's neat because, you know, on the page I suspect
18 we're going to here, the Base Case Assumption with the
19 discounted cashflow analysis really shows how Cisco broke down
11:38 20 their view of this and talks -- actually, it was the next page
21 that I was pointing to, but this is the prior page which kind
22 of breaks some things down as well.

23 Q. So you really like this next page, which is page 11,
24 right?

25 A. Well, I like both. They go hand-in-hand.

1 Q. So what I want to concentrate on is what this says. This
2 is Cisco's evaluation of Nuova before it acquired Nuova, right?

3 A. That's right. This was the analysis that was used for
4 that purchase price.

5 Q. And this page shows that Cisco treated the server revenue
6 and the switch revenue differently, correct?

7 A. Up to a point, up until 2013 before they combine it.

8 Q. Okay, so --

9 A. And that's why I use it as a comparator, and I explained I
11:39 10 don't whittle it down, but it's a comparator to figure out
11 payment relative to cashflow.

12 Q. The financial projections for this document forecasts that
13 the revenue from the switch product would be greater than the
14 revenue from the server product, right?

15 A. Yes. I talked about this a few minutes ago during my
16 direct.

17 Q. And then you agree with me -- let's not just talk about
18 revenue, let's talk about gross margins. Gross margin is
19 another word for "profit"? You agree with me?

11:39 20 A. It is a type or particular measure of profit. There's
21 different measures of profit, "gross margin" being one.

22 Q. Okay. So you would agree with me that Cisco projected
23 that the gross margin for the server product was going to be
24 different from the gross margin for the switch product, right?

25 A. During the first period of years up to 2013, before they

1 then combine it thereafter.

2 Q. Would you agree --

3 A. And again, just on a percentage basis, not a dollar basis.

4 Q. Would you agree with me that the profit margin for the
5 switch business was expected to be higher than the profit
6 margin for the server business?

7 A. Close but not quite. So on a percentage gross margin
8 basis for this time period, the switch has higher profit
9 margins. You can see that going across 50 percent, 55, 60, 65,
11:40 10 and that's greater than the server gross margin percentages
11 which are lower, and --

12 Q. Just make sure I understand your answer, sir. Would you
13 agree with me that the profit margin for the switch business
14 was expected to be higher than the profit margin for the server
15 business?

16 A. Only for a period of time.

17 Q. Okay. But Cisco, as it's doing its projections, projected
18 the profit margin for the server base was going to be different
19 than the profit margin for the switch business, right?

11:41 20 A. For a period of time.

21 Q. Right.

22 A. Again, if we can just go up. Yup, right there,
23 "terminal."

24 Q. Yes. Up through 2013, right, sir?

25 A. Exactly. Then they do a terminal value out into

1 perpetuity, which again, it's neat that they did that.

2 Q. You would agree with me that Cisco considered the switch
3 business to be a greater driving force in the purchase price of
4 Nuova, right?

5 A. No. There's been some dispute and debate over that, and I
6 recognize that Cisco has made some of those claims.

7 Q. I just want you to concentrate on what my question was,
8 sir.

9 A. I thought I was.

11:41 10 Q. It's fair to say that Cisco would have considered the
11 switch business a greater driving force in the purchase price
12 it was willing to pay for Nuova, right, sir?

13 A. There is dispute over that.

14 Q. Okay. Can I get Mr. Herzka again, please, can you play
15 clip S84. It's just, so you can follow along with your
16 deposition, it's 212 lines 8-11.

17 "QUESTION: So is it fair to say that Cisco would have
18 considered the switch business a greater driving force in the
19 purchase price it was willing to pay for Nuova?

11:42 20 "ANSWER: That's possible."

21 Q. Now, one of the things you did in order to measure the
22 value of the '430 patent was to measure the cost savings to
23 Cisco's customers -- true?

24 A. I have considered cost savings.

25 Q. And you agree that the economic benefit of the '430 patent

1 can be measured by a cost saving benefit of UCS to Cisco's
2 customers, right?

3 A. I utilized cost savings as a means of relative
4 apportionment. That was the 55.3 percent.

5 Q. And I think you mentioned something called TCO in your
6 direct, is that right, sir?

7 A. Yes, we've heard that a lot.

8 Q. And TCO is the total cost; that is just the initial
9 purchase of the product and all expenses for the product over
11:43 10 its lifetime, right?

11 A. Generally speaking. It's the upfront capital costs and
12 the maintenance costs going forward; you know, power
13 consumption, cost of electricity, for example.

14 Q. And it's your position that the customer cost savings were
15 the primary driver of Cisco's UCS sales, right?

16 A. It is.

17 Q. Okay. Now, let me talk about cost savings for a second.
18 In your work on this case, you looked at what some actual
19 customers reported as to what cost savings they had with UCS,
11:44 20 right?

21 A. I'm not sure if you're referring to the 15 case studies.

22 Q. Actually, I'm referring to, in your work on this case, you
23 told us all you looked at lots of different documents, right?

24 A. I did.

25 Q. Right, and one of the things that you looked at was, you

1 looked at actual case studies, where actual customers report
2 with respect to how they use UCS, right?

3 A. I did, and that's why it's referencing the 15 that's
4 feeding into the 55.3 percent. I mean, there are lots of other
5 documents in the case, but I'm guessing that's what you're
6 referring to.

7 Q. Well, sir, this binder contains what we got from Egenera's
8 lawyers when they asked Cisco's customers about how they use
9 UCS. So can you turn to tab PX-BLK in your binder? Are you
11:45 10 there, sir?

11 A. I think so.

12 Q. Yeah. It's PX-BLK.

13 A. Okay.

14 Q. And that's a document from -- now, we have to, I think the
15 judge told us yesterday that we have to talk about some of
16 these, some of this correspondence without saying, revealing
17 the identity of the actual names of the customers and actual
18 names of the people, but you recognize this as a large
19 financial institution, right?

11:46 20 A. I do.

21 Q. Okay. So, that document is correspondence from that large
22 financial institution that Egenera's lawyers solicited, right?

23 A. If you say so. I don't have personal knowledge of that,
24 but it very well may be.

25 Q. So if you go to page three of that document, you can see

1 that Egenera's lawyers asked this customer if it had ever saved
2 money by choosing UCS over alternative options or its previous
3 solutions, right?

4 A. No. But there is a question like that in this document.

5 Q. The question that you're referring to says, "Did you save
6 money by choosing UCS over alternative options or your previous
7 solutions; if so, please describe how you saved money." Do you
8 see that, question number 12?

9 A. I do.

11:47 10 Q. The actual customer said "no." Correct?

11 A. That's what's listed here.

12 Q. Okay. So at least this customer reports that it did save
13 money by using the UCS, right?

14 A. I can tell you what they say here, which is that they did
15 not describe how they saved money.

16 Q. I read that accurately, didn't I, sir?

17 A. That is how it reads, yes.

18 Q. Now, you know that, you know -- maybe you don't. We
19 talked to Dr. Jones, and we had a discussion yesterday about
11:47 20 fibre channel over Ethernet, do you recall that?

21 A. You and I did not have that discussion.

22 Q. Okay.

23 A. Perhaps you're referring to --

24 Q. You were here throughout the whole trial though, right?

25 A. I have been.

1 Q. And you were here when Dr. Jones said that, you know,
2 using fibre channel over Ethernet helps reduce cabling, right?
3 Do you remember that?

4 A. To a degree.

5 Q. Okay.

6 A. Again, I did not approach my work as a computer scientist
7 because I'm not. I'm an economist.

8 Q. So you agree, don't you, that Egenera didn't invent fibre
9 channel through Ethernet, right?

11:48 10 A. It is my understanding that they did not do so, but I do
11 not have an independent opinion in that regard.

12 Q. Right, you only get your opinions on technical matters
13 from Dr. Jones, right?

14 A. On matters of infringement.

15 Q. You don't have any other opinions in this case other than
16 on matters that have to do with the infringement that's alleged
17 in this case, right?

18 A. I did not follow that.

19 Q. Your work in this case is limited to what technical
11:48 20 information you got from Dr. Jones, correct, in terms of
21 technical analysis of the products, right?

22 A. Well, no. I mean, certainly I interviewed Professor Jones
23 and I reviewed his reports. I've also seen reports of other
24 experts and other testimony.

25 Q. Okay. But your technical analysis of what infringes and

1 what doesn't infringe comes from Dr. Jones, right?

2 A. Close but not quite. I did not perform a technical
3 analysis of what infringes and what does not infringe. For
4 that I rely upon Dr. Jones to make that determination, and then
5 that's what feeds into my economic analysis for damages.

6 Q. Okay. Now, you know that Cisco has its own damages
7 expert, right?

8 A. Yes, I do.

9 Q. And you're going to hear -- Cisco's damages expert is
11:49 10 going to come up and testify, and his name is Doctor Stephen
11 Becker, right?

12 A. That is his name and I presume he will come up here and
13 testify.

14 Q. And he had the same access to the same materials that you
15 did, right?

16 A. I would presume it's largely the same.

17 Q. And he reached a different conclusion than you, correct?

18 A. He did.

19 Q. Okay. Well, let's see where you and Dr. Becker might
11:50 20 agree. Now, you talked about a framework called "the
21 hypothetical negotiation," right?

22 A. I did.

23 Q. Okay. And you both applied that framework, that
24 hypothetical negotiation framework to determine what would be a
25 reasonable royalty in this case, right?

1 A. We both used that framework, yes.

2 Q. And we heard about the Georgia-Pacific Factors I think.

3 You put a slide up listing out all the Georgia-Pacific Factors,
4 right?

5 A. I did. Then I put them into buckets and I used that to
6 help organize my presentation.

7 Q. And you agree that both you and Dr. Becker considered the
8 Georgia-Pacific Factors in your presentations, right, in your
9 damages opinions, right?

11:51 10 A. We did consider the Georgia-Pacific Factors, yes.

11 Q. Now, one of the things that we talked about, or you talked
12 about on direct, was that determining a reasonable royalty at
13 the hypothetical negotiation involves figuring out what a
14 willing licensor, which would be Egenera in this case, and a
15 willing licensee, would have bargained for in an arms-length
16 negotiation, right?

17 A. That's right. That's slide nine.

18 Q. Yes. That's, actually, I can put up your slide if it
19 helps you. Actually, I'm going to show you slide 10. Is that
11:51 20 all right, sir?

21 A. As you wish.

22 Q. Okay. So, and the reason why I'm showing this slide 10,
23 we all agree that this hypothetical negotiation between Egenera
24 and Cisco would have happened in July of 2009, right?

25 A. That's right, that is not disputed.

1 Q. And we expect that at this table, both Egenera and Cisco
2 would have behaved reasonably, correct?

3 A. Yes. Cisco's damages expert agrees with me on that.

4 Q. And the royalty resulting from the hypothetical
5 negotiation is not something that either side would prefer,
6 right? It's just, it's you do the negotiation, you come up
7 with a, you come up with an agreement, right?

8 A. It's the outcome based upon all the information that's
9 shared among the parties and having a willing licensor and a
11:52 10 willing licensee, again recognizing known infringement, known
11 validity. That's the framework.

12 Q. And you know, I think you made this point on direct, this
13 negotiation is hypothetical because Cisco never licensed the
14 '430 patent, right?

15 A. That's right.

16 Q. In fact --

17 A. Otherwise, we would not be here.

18 Q. Right. And no one ever licensed the '430 patent, right?

19 A. Not in a patent license, that's right.

11:53 20 Q. So let's look at what this Egenera person would have known
21 at the hypothetical negotiation table in July of 2009, okay,
22 because the real world doesn't go away, right, at this table?

23 A. Well, the hypothetical negotiation is based in real world
24 facts, as I explained, and it's a, you know, on the next slide
25 11, where I explain it's a cards up on the table where the

1 information is known and shared.

2 Q. So let's look at the cards up on the table.

3 A. Which is slide 11. Yes, that's the one.

4 Q. That's the one, right? So these are the cards up on the
5 table that everybody knows exists in the real world, right?

6 A. It's all the available information, but in the real world,
7 this information was not disclosed to Egenera, and Egenera's
8 information was not disclosed to Cisco. There was information
9 that was withheld, but the hypothetical negotiation, that's all
11:54 10 put out on the table. That's the distinction I was seeking to
11 draw.

12 Q. So let's talk about what the Egenera person would have
13 known. Now, you looked, in your work in this case, at
14 Egenera's financials, right?

15 A. I did.

16 Q. Okay. And in order to find out what Egenera's income was
17 for the relevant time period, you reviewed Egenera's financial
18 statements, right?

19 A. I wouldn't put it that way, but I did review their
11:54 20 financial statements that has revenue, various forms of costs,
21 and different types of profit and income measures.

22 Q. And this is the financial statements that Egenera told its
23 accountants, right?

24 A. It's really a joint process.

25 Q. Egenera -- I'm sorry, the information about Egenera's

1 financials that you took into consideration came from Egenera's
2 financial statements, right?

3 A. If I heard you right. I mean, the financial information
4 comes from financial statements. There is other information
5 too, but that's where the financial metrics are conveyed.

6 Q. What I'm showing you, this is from your report, correct,
7 sir?

8 A. That's right. That's one of the attachments.

9 Q. Right. So it's a financial summary of Egenera, right?

11:55 10 A. That's right.

11 Q. Okay. And you know that Egenera reported a decline in its
12 product revenue starting in 2006, right?

13 A. So yes, in 2006 for product revenue was the peak.

14 Q. Right, and then it started going down in 2007, right?

15 A. I wouldn't -- it's effectively flat. I mean that's --

16 Q. Then it went down in 2008 to 62.4, right? This is before
17 the hypothetical negotiation, right?

18 A. That's right.

19 Q. Okay. And then in 2009 -- the hypothetical negotiation
11:56 20 would have occurred in 2009, right?

21 A. That's right.

22 Q. And the revenues continued to go down to 37 million,
23 right?

24 A. They do go down at roughly 37 million.

25 Q. You also have something in here called, that you, again

1 from Egenera's financial statements, something called,
2 "operating income," do you see that on here? I highlighted it
3 on the left, "operating income"?

4 A. I do see that.

5 Q. Okay. And just so we're all clear, when you look at
6 financial statements, if it's in parentheses, a number that's
7 in parentheses like we see here, that's negative, right?

8 A. It can be. In this case, that is what it conveys.

9 Q. Okay. So from the inception of the company, all the way
11:57 10 through the hypothetical negotiation, Egenera never had a
11 positive operating income, correct?

12 A. That was the intention, that's right.

13 Q. Okay. Let's look at some other things that would happen
14 right before the hypothetical negotiation. Now, you know that
15 Egenera laid off 28 percent of its workforce in around the
16 hypothetical negotiation, right?

17 A. Around that time, yes, I'm aware of that fact.

18 Q. So if we look at JTX-368, this is an article about Egenera
19 doing layoffs, and it happened in November of 2008, do you see
11:57 20 that?

21 A. I see that.

22 Q. And at the time of the hypothetical negotiation, these
23 layoffs would have occurred, right?

24 A. I'm sorry, I couldn't hear you.

25 Q. Sure. At the time of the hypothetical negotiation, these

1 layoffs would have occurred, right?

2 A. Not quite. I mean, this is November 2008, so it's not at
3 the time of the hypothetical negotiation which was July 2009,
4 but yes, this is information that I documented in my report.

5 Q. Right. So just to make sure I'm clear, the layoffs would
6 have already had occurred by the time of the hypothetical
7 negotiation; you agree with me, right?

8 A. That's right.

9 Q. Now, the jury's seen some video clips from Egenera's
11:58 10 former CEO, Mr. Thompson. Do you remember seeing some of those
11 clips, sir?

12 A. Yes, I do.

13 Q. Now, you know that Egenera made the decision to stop
14 selling hardware and transition to a software-only company at
15 the end of 2008, right?

16 A. As I understand, a decision to a software-centric company,
17 although they did continue to sell the BladeFrame product.

18 Q. At least by October 30, 2008, Egenera had made the
19 decision to stop selling hardware and transition to a
11:59 20 software-only company, true?

21 A. I don't recall the exact date, but around that time there
22 was this transition. As we know, they continued to sell
23 BladeFrame thereafter, but there was a software-centric focus
24 for the company from that point forward.

25 Q. And you were here when Mr. Manca testified that up until

1 2008, they had planned to release a second hardware product
2 called the BladeFrame 2, right?

3 A. I recall that.

4 Q. And they canceled that project, right?

5 A. I do understand that.

6 Q. And that happened before the hypothetical negotiation,
7 right?

8 A. I believe so.

9 Q. Right. Now, you were here when Egenera's counsel
11:59 10 questioned Mr. Jayakrishnan regarding a company called
11 "Savvis," right?

12 A. Yes.

13 Q. And that, and I think you showed us an email from Nuova
14 when they were negotiating with or reporting something about
15 talking to Savvis, right?

16 A. December 2007, that's right.

17 Q. All right. So if you go to your binder, I think it should
18 be, there is a document in there, DX-EN. Let me know when
19 you're there.

12:00 20 A. I've got a few binders here. Do you happen to know which
21 one?

22 Q. It's binder number one, and there should be a tab saying
23 "DX-EN."

24 A. E-N as in Nancy?

25 Q. Correct, N as in Nancy.

1 A. Okay.

2 Q. And these are notes that Egenera's CEO took when he had a
3 conversation with an executive at Savvis, right?

4 A. I do not know.

5 Q. Okay. So let's take a look together, and this will be the
6 next Exhibit number, which is JTX- 546.

7 (Exhibit JTX-546 received into evidence.)

8 Q. So just look at the top. Mike Thompson, that's the CEO,
9 former CEO of Egenera, correct?

12:01 10 A. Correct.

11 Q. And it's happening on February 12, 2009, do you see that?

12 A. I don't know what you mean by "it's happening," but there
13 is a date up there.

14 Q. Right. So the date of these notes are, is February 12,
15 2009. Do you see that?

16 A. I see it listed on the document, but I cannot represent
17 what that means, given that I do not have personal knowledge of
18 the document.

19 Q. You don't have personal knowledge of the document. So
12:01 20 let's see what Mr. Thompson recalls talking to Savvis about.
21 So this is a memo. I'm sorry, in this memo, in the third
22 paragraph, do you see where he says, "I then switched to
23 relationship." Do you see that paragraph?

24 A. I do.

25 Q. Right. And he says, he asked -- Savvis is asking

1 Mr. Thompson whether Egenera was a mainstream partner. Do you
2 see that? Right? First sentence of the third paragraph?

3 A. I see what it states for sure. I mean, I am capable of
4 reading, but again, I did not prepare this document so I can't
5 validate those pieces for you, but happy to read through with
6 you.

7 Q. Okay. And it says, "Bill," who is the executive at
8 Savvis, right?

9 A. I can take your representation for it.

12:02 10 Q. And he discussed how -- well, don't take my
11 representation. These are notes from Egenera's CEO, right?

12 A. If that's your representation.

13 Q. You read Mr. Thompson's deposition, right?

14 A. Yes. Among 50 depositions.

15 Q. And you looked at the Exhibits to the depositions, right?

16 A. I did.

17 Q. And so this is a document that was -- you know, this isn't
18 coming out of some archive somewhere. This was used at
19 Mr. Thompson's deposition, do you see that?

12:03 20 A. It appears that way.

21 Q. Okay. So getting back to that third paragraph, they said,
22 Savvis says, "discussed how they originally chose BladeFrame."
23 You see that? You see where I'm pointing?

24 A. I do.

25 Q. Okay. And then they "switched to HP." Do you see that?

1 I read that correctly, didn't I?

2 A. The parts you read, I believe you read correctly.

3 Q. And then it says, later in that paragraph, you see
4 paragraph that says, "It all became clear to me"?

5 A. Right. It starts a different paragraph.

6 Q. Right. The sixth paragraph now says -- we're counting the
7 notes -- says, "Savvis uses BladeFrame/PAN for shared physical
8 hardware." Do you see that?

9 A. I see where you're pointing and what you're reading.

12:04 10 Q. Then it says Savvis uses HP C-class for dedicated
11 hardware." Do you see that?

12 A. I believe you're paraphrasing, but I see it.

13 Q. "And HP VMWare for cloud/virtual offerings," do you see
14 that?

15 A. I do.

16 Q. Okay. And talks about what's going on with the company,
17 and then he says at the end, "I believe they now see us,"
18 meaning Egenera, "as legacy." Do you see that?

19 A. I see the, "I believe they now see us as legacy."

12:04 20 Q. Okay. So as of February 2009, four or five months before
21 the hypothetical negotiation and before UCS ever launched,
22 Egenera's CEO reports its largest customer, Savvis, was moving
23 away from BladeFrame into HP, correct?

24 A. I could not validate that for you without going back and
25 taking a look at his deposition.

1 Q. Okay. Now, can I get -- well, you know what, let me start
2 with the document camera. We talked about an email and you
3 showed it on your direct. It was JTX-59, and it was an email
4 from, again, from Mr. Thompson to an investor in Egenera. Do
5 you recall that?

6 A. I do.

7 Q. Okay. So we looked at a little bit of it. I just think
8 it's interesting to look at the original question that the
9 investor asked for Mr. Thompson to provide a response to
12:05 10 because it wasn't coming out of the blue, right? It was a
11 response to a question from Egenera's investors, right?

12 A. One of them, yes.

13 Q. Okay. So Mr. Dave Epstein, right, who is an investor in
14 Egenera, you agree with that, right?

15 A. My understanding it's Crosslink Capital, but yes.

16 Q. Okay. And so he asked, he asked Mr. Thompson to report on
17 certain things, do you see that? And he says "To that end, can
18 you provide me, verbally or written, with the latest color on
19 possible buyers, this" -- and you would say that's quarterly
12:06 20 sales, right, "Q sales" is quarterly sales?

21 A. That would be my inference.

22 Q. "Your assessment of revenue for 2009, assuming the
23 headcount we can get without triggering Warren." Do you see
24 that?

25 A. I do.

1 Q. And it has to do with a statute in Massachusetts, right?

2 A. That is my understanding. I mean, I'm not a legal scholar
3 but that is my understanding.

4 Q. And then he says, "And your gut sense as to the
5 conservative dollar value assuming one bidder," and that dollar
6 value is asking for the dollar value that someone would pay for
7 Egenera, right?

8 A. A gut sense conservative value assuming one bidder.

9 Q. So Mr. Thompson answers the next day, December 6, 2008,
12:07 10 and provides answers to Mr. Epstein's questions, right?

11 A. He responds to the email, which is what I was showing
12 earlier, right?

13 Q. So let's go to -- can I get, Mr. Herzka again please, and
14 Mr. Herzka, can you go to DDX 10.6 just so we can talk about
15 the specifics of the valuation question.

16 So regarding the valuation part of Mr. Epstein's question, he
17 assumes \$50 million for Egenera with one buyer, do you see
18 that?

19 A. I do. That's what I was mentioning and describing during
12:07 20 my direct exam.

21 Q. And he says, "With one buyer "based on our customer base
22 replacement value, engineering talent, and core expertise in
23 infrastructure virtualization, and IP." He says that, right?

24 A. He does.

25 Q. Okay. So the valuation that Mr. Thompson is providing to

1 one of Egenera's investors includes customer base replacement
2 value, engineering talent, core expertise in infrastructure
3 virtualization, and IP, true?

4 A. It does, reflecting that it does not reflect Cisco's use
5 of known valid patent technology and known infringement.

6 Q. I understand that's your testimony, sir, but you agree
7 that I read that correctly, right? Mr. Thompson is telling an
8 investor from Egenera that his valuation includes customer base
9 replacement value, engineering talent, core expertise in
12:08 10 infrastructure virtualization, and IP. I read that correctly,
11 didn't I, sir?

12 A. You paraphrased some of it, but yes.

13 Q. What did I paraphrase?

14 A. The beginning part. It's all good. I mean it's -- I mean
15 I can read it too. We talked about it.

16 Q. Now, around the time of the hypothetical negotiation, you
17 know that Egenera and its bankers reached out to 23 companies,
18 right? You heard that testimony?

19 A. That is my understanding.

12:09 20 Q. And they're trying to gauge their interest in acquiring,
21 engage anyone's interest in acquiring Egenera, right?

22 A. As a potential transaction.

23 Q. Cisco was one of those 23 companies that was reached out
24 to, right, sir?

25 A. I believe there were discussions in that regard.

1 Q. And you know, don't you, that none of those 23 companies
2 acquired Egenera, right?

3 A. That's right. There were not terms that were agreeable.

4 Q. And you know, don't you, that no one ever took a license
5 to the '430 patent, right?

6 A. That's right.

7 MR. McDAVIT: I pass the witness.

8 THE COURT: All right. Redirect?

9 **REDIRECT EXAMINATION**

12:10 10 BY MR. BATCHELDER: :

11 Q. Can we start, please, Mr. Fitzgerald with slide 18 from
12 Dr. Sullivan's demonstratives. This was the first subject
13 raised in your cross-examination. It was the "Egenera is
14 wicked cool" from Jason Shaw, and I believe Cisco's lawyer was
15 asking you to second guess your conclusion that Jason Shaw
16 believed that Egenera had innovative technology. Let's put up
17 the slide, please.

18 Here is the "Wicked Cool" on the bottom, and then here is a
19 quote from Jason Shaw's deposition. What does it say in the
12:10 20 answer there?

21 A. So here Mr. Shaw was explaining that Egenera had
22 innovative technology, that they were doing something that no
23 one else did, and that he would call them an innovator.

24 Q. Okay. So any doubt in your mind from the evidence you see
25 that Mr. Shaw at Cisco believed that Egenera had done something

1 innovative here?

2 A. Not at all. This was his deposition testimony under oath
3 and I would expect it to be truthful.

4 Q. Did something no one else did, right?

5 A. That's right.

6 Q. Okay. You were next, I believe, asked a question about
7 this binder number three, and you were asked to turn to a tab,
8 and you were asked, by the way, not to identify the name of the
9 financial institution involved, and I respect that request.

12:11 10 It's PX-BLK.

11 Do you recall that questioning?

12 A. I do.

13 Q. Okay. And it was in connection with your use of cost
14 savings as a technical apportionment in your analysis. Do you
15 remember that?

16 A. That was the suggestion.

17 Q. Okay. And the predicate for that was your explanation to
18 the jury that cost savings was a benefit of the '430 patent
19 infringing it, right?

12:12 20 A. It is a benefit.

21 Q. Okay. Now, keep that in mind if you would, and can we
22 have the document camera for a moment, please?

23 You were here during Dr. Jones' testimony of course, correct?

24 A. Yes.

25 Q. And he explained that he had looked at 29 Cisco customers

1 who provided information in response to questioning; do you
2 remember that?

3 A. I do.

4 Q. And he says here, "28 of the 29 customers have UCS set up
5 in an infringing way." Do you see that?

6 A. I do.

7 Q. This document that you were just shown, this PX-BLK, it
8 was from the one customer who was not using it in an infringing
9 way, correct?

12:12 10 A. That's right.

11 Q. How misleading is that?

12 A. In my view, quite.

13 Q. Does this undercut your technical apportionment using cost
14 savings in any way?

15 A. No. Not at all. The cost savings analysis and
16 apportionment is applied to the entities and the sales that are
17 used in an infringing UCS system, and this would not apply.

18 Q. So he cherry-picked the one that wasn't infringing and
19 used that?

12:13 20 A. Correct. It just simply is not applicable.

21 Q. All right. Can we pull back up JTX-54 at page 11, please.

22 A. This is the cashflow analysis that I've alluded to
23 multiple times.

24 Q. Exactly. So Mr. Fitzgerald is pulling that up now. I
25 believe it was suggested that you should have just used the

1 \$747.5 million acquisition price as a cap and then somehow
2 apportioned UCS versus the Nexus Switch. Why didn't you do
3 that?

4 A. Well, simply put, it would be wrong. The transaction with
5 Nuova, between Nuova and Cisco, is a comparator. It's a
6 comparable in the sense that it demonstrates the relationship
7 between payment and cashflows. If one were to cap the overall
8 amount at \$747,500,000 and be whittling that down, it would
9 provide a windfall to Cisco because the hypothetical
10 negotiation yields a royalty per server, a running royalty, and
11 that royalty applies then to actual sales. That's the way the
12 parties would structure the hypothetical license. That's the
13 way parties do this in the real world. It's also the way that
14 Cisco structured the transaction because the transaction, as I
15 noted from Mr. Chambers who was then their CEO, indicated that
16 the transaction, the payments were based upon those earnout
17 payments of revenue and profitability.

18 So if one were to just simply whittle down versus using it as a
19 comparator, one would be omitting tremendous value that was
20 actually supplied by the technology claimed in the '430 patent.

21 Q. What became of the UCS revenues as compared to these early
22 projections?

23 A. They were much larger. And just by way of example, I was
24 indicating that within two years, they were at a run rate of
25 \$1.1 billion annually, two years after launch. And then, by

1 2013, as I showed, they were actually at \$2 billion in server
2 revenue. And, you know, you recall here from 2013, the server
3 revenue is 397 million. That's roughly 400 million. That
4 means the actual revenue was five times that amount, and then,
5 as we know, it grew from there up to \$3.5 billion.
6 So if one were to cap the value at that Nuova transaction price
7 of 747,500,000, that would ignore all of the value contribution
8 of the '430 patent and, you know, would not be, in my view,
9 reasonable.

12:16 10 Q. It would ignore the contributions to what became a
11 300 billion-dollar running rate?

12 A. That's right.

13 Q. Would that be fair or a windfall to Cisco?

14 A. In my view, it would not be reasonable to exclude that,
15 but rather, that would generate a windfall for Cisco being able
16 to utilize the patented technology in the marketplace that
17 allowed them to enter, allowed them to have these sales, but
18 then to not compensate for it. As an economist, that would not
19 be reasonable.

12:17 20 MR. BATCHELDER: May I have one moment, your Honor.

21 THE COURT: You may.

22 Q. Dr. Sullivan, coming back to your reasonable royalty
23 determination, how can the jury be assured that the royalty
24 you've determined is indeed reasonable?

25 A. In multiple ways. One, I have done extensive research and

1 analysis. I've done my best to convey that in a condensed
2 period of time here today. I took strong details each step
3 along the way to ensure that the framework, the royalty
4 structure, and the analysis is well-founded based upon, you
5 know, reliable facts.

6 What's interesting here to me as an economist is -- I suppose I
7 would relate this as a perfect storm. It's an unusual
8 situation where you have a breakthrough-pioneering technology
9 that is coupled with Cisco's position in the marketplace to
12:18 10 commercialize this just at the right time. So they use this
11 once-in-a-generation change in the server architecture to
12 tremendous financial success, and ultimately, that yields a
13 royalty that I've determined of \$371 million that is very
14 substantial; yet, as I also indicated, this allows -- this
15 would be a profit-enhancing endeavor for Cisco and Egenera.
16 They would be a willing licensor and a willing licensee because
17 it allows Cisco to maintain most of the revenue and most of the
18 profits.

19 So they would, even after paying this royalty, still be in a
12:19 20 very strongly profit-enhancing endeavor with the technology.

21 Q. Thank you, Dr. Sullivan.

22 MR. BATCHELDER: Your Honor, I pass the witness.

23 THE COURT: All right. Anything further?

24 MR. McDAVIT: Just briefly, your Honor.

25

RECROSS EXAMINATION

2 BY MR. McDAVIT:

3 Q. Counsel for Egenera asked if I cherry-picked the customers
4 that reported no cost savings. Do you recall those questions?

5 A. I do.

6 Q. Okay. So can you look at your binder again, just the ones
7 that have the cost savings. I think there is a third-party
8 binder that you have, and there's one called PX-BKP?

9 A. I did not follow the letters.

12:20 10 Q. I'm sorry, it's bravo, kila, papa?

11 A. Bravo, kila?

12 Q. Bravo, kila, papa.

13 A. Oh, "papa." Sorry, I didn't follow that one.

14 Q. I've got to use, break out the phonetic alphabet for that.

15 A. Okay. BKP, I'm there.

16 Q. This is a customer that's a large financial institution,
17 right, or investment bank?

18 A. No. It's not an investment bank.

19 Q. How would you characterize it, sir?

12:21 20 A. Asset management.

21 Q. Okay. Let's call it an asset management group. And they
22 report -- again, if you look at their responses to Egenera's
23 lawyers' request for information, their -- if you look at the
24 declaration that was provided, they don't report saving any
25 money with UCS, right?

1 A. Actually, in contrast, they do talk about the --

2 Q. If you look at paragraph 14, sir. It says, "money was not
3 a primary driver for this customer's decision," right?

4 A. That's right. The Cisco product is more expensive.

5 Q. And if you go to PX-BLJ, so that's bravo, lima, Juliette,
6 this is a virtualization company, right, sir?

7 A. That is my understanding.

8 Q. And if you look at paragraph 15 of this Declaration, it
9 says that UCS was not the cheapest solution that this customer
12:22 10 considered; right, sir?

11 A. Precisely.

12 Q. Okay. And if you look at another large company called --
13 it's, your tab should be PX-bravo, kila, Mike. You're really
14 testing my phonetic alphabet memory. It should be in your
15 binder, sir.

16 A. Okay. I'm there.

17 Q. And Egenera's lawyers again asked, "Did you save money by
18 choosing UCS over alternative options?" Do you see that in
19 paragraph 20, that customer said "no." Do you see that, sir?

12:22 20 A. I do.

21 Q. Okay. No further questions.

22 THE COURT: Okay. Egenera?

23 MR. BATCHELDER: Nothing further with this witness,
24 your Honor, thank you.

25 THE COURT: Okay. Anything further for the record?

1 MR. THOMASES: Good afternoon, your Honor. Andrew
2 Thomases. Before we rest, we did have some documents to move
3 in. I don't know if there's been a resolution on the documents
4 from the Cisco customers that were in that summary form that
5 Dr. Jones had with the redacted names.

6 THE COURT: I think I can address that very quickly.
7 There might be some confusion but I thought I ruled clearly
8 they're admissible but my concern is protecting the
9 confidentiality. So the thought is the jury would see them but
12:23 10 not the public. They will remain sealed for the jury's
11 purposes.

12 MR. THOMASES: Can I just read in the prior number and
13 the new JTX number for the record?

14 THE COURT: You may.

15 MR. THOMASES: Thank you. So PXB-JV is JTX-547;
16 PXB-JW is JTX-548; PXB-JX is JTX-549; PXB-KD is JTX-550; PXB-KE
17 is JTX-551; PXB-KH is JTX-552; PXB-KI is JTX-553; PXB-KJ is
18 JTX-554; PXB-KK is JTX-555; PXB-KL is JTX-556; PXB-KM is
19 JTX-557; PXB-KN is JTX-558; PXB-KR is JTX-559; PXB-KZ is
12:25 20 JTX-560; and PXB-LD is JTX-561.

21 Thank you, your Honor. With that, Egenera rests its case.

22 (Exhibits JTX-547, JTX-548, JTX-549, JTX-550, JTX-551,
23 JTX-552 received into evidence.)

24 (Exhibits JTX-553, JTX-554, JTX-555, JTX-556, JTX-557,
25 JTX-558 received into evidence.)

1 (Exhibits JTX-559, JTX-560, JTX-561 received into
2 evidence.)

12:25 10 [SIDE BAR AS FOLLOWS:

11 THE COURT: I just wanted to give Cisco the
12 opportunity to put on the record a motion that I know it wishes
13 to make at this point.

14 MR. DESMARAIS: Thank you very much, your Honor.
15 Cisco at this point would move for judgment as a matter of law
16 as no infringement, and, no willful infringement. And I
17 understand your Honor is going to permit us to file the reasons
18 behind that motion in paper form, which we'll do later this
19 afternoon.

24 MR. THOMASES: Would you like Egenera to file an
25 opposition or after the case on the material?

1 THE COURT: I don't think you have to do it now, but
2 certainly by the time we get to the conclusion of the case, you
3 will want to reply I think.

4 MR. THOMASES: Thank you.

5 MR. DESMARAIS: Thank you.

6 ..END OF SIDE BAR]

7 THE COURT: Okay. I think we're ready to go ahead.
8 Cisco may call its first witness.

9 MR. DESMARAIS: Thank you, your Honor. Cisco is
12:27 10 pleased to finally call its witness. Our first witness will be
11 Mike Dvorkin. He was at Nuova and he was the system architect
12 for the UCS system that this case is about. He'll explain how
13 it's designed, how it's different from the Egenera approach,
14 and his testimony relates to bedrock fact number three.
15 My colleague, Peter Magic, will do the direct examination.
16 Thank you, you Honor.

17 MIKE DVORKIN, having been duly sworn by the Clerk, was
18 examined and testified as follows:

19 THE CLERK: You may be seated. Could you please
12:28 20 introduce yourself to the jury, spelling your last name for the
21 record.

22 THE WITNESS: My name is Mike Dvorkin. M-I-K-E, D as
23 in David, V as Victor, O-R-K-I-N as in Nancy.

24 DIRECT EXAMINATION

25 BY MR. MAGIC:

1 Q. Good morning, Mr. Dvorkin.

2 A. Good morning.

3 Q. Would you please introduce yourself?

4 A. My name is Mike Dvorkin.

5 Q. And where do you live?

6 A. I live in Redwood City in the heart of Silicon Valley.

7 Q. Do you have a family?

8 A. Yes, I do. I live with my girlfriend of three years and
9 we share three kids; a girl who is in high school and two boys,
12:29 10 a 22-year old who is in college and a seven-year old boy.

11 Q. And who is your current employer?

12 A. My current employer is Cisco Systems.

13 Q. And in total, how many years have you worked at Cisco?

14 A. Well, gee, about a dozen.

15 Q. And is this actually your last week with Cisco?

16 A. Yes. This is my last week at Cisco.

17 Q. And why is that?

18 A. I'm a software entrepreneur. I am about to pursue
19 something new and interesting, hopefully.

12:29 20 Q. Okay. Well, today we're going to talk about your time at
21 Cisco and Nuova. So what's your current job title at Cisco?

22 A. I am a distinguished engineer.

23 Q. What is that title? What is a distinguished engineer?

24 A. Distinguished engineer is a type of engineer that looks at
25 new technologies and new markets and combines those things

1 together and decide what products we need to pursue and how to
2 implement that at an architectural level.

3 Q. And how many years of total work experience do you have
4 across your career?

5 A. Twenty-nine.

6 Q. And did you previously work at the company called Nuova?

7 A. Yes, I did.

8 Q. Did you work on UCS at Nuova?

9 A. Yes, that's correct.

12:30 10 Q. And what aspect in particular of UCS did you work on?

11 A. I was responsible for the architectural implementation of
12 the UCS Manager, management control plane for the UCS system.

13 Q. You said architecture and implementation?

14 A. Yes, that's correct.

15 Q. And did you ever work at Egenera, Mr. Dvorkin?

16 A. No, never did.

17 Q. All right. So we'll talk a little about your background
18 before you worked at Nuova. So where did you go to college?

19 A. I went to college in University of Illinois, in
12:30 20 Urbana-Champaign.

21 Q. Where did you -- I'm sorry, what degree did you get?

22 A. I got a double major in, I have bachelors of science in
23 computer science and electrical engineering.

24 Q. And when did you graduate, what year?

25 A. I graduated at the end of '92.

1 Q. And before you even got to Nuova, about how much
2 experience did you have in management software for data
3 systems?

4 A. I had about 12, 13 years.

5 Q. And just prior to coming to Nuova, what company did you
6 work at?

7 A. I was at Xsigo Systems.

8 Q. And what years were you with the company Xsigo Systems?

9 A. Approximately, from 2004 to 2006 right until I joined
10 Nuova.

11 Q. What kind of work did you do there at Xsigo Systems?

12 A. I was a systems management architect. I was responsible
13 for implementation and architecture of all the management
14 system for the Xsigo systems.

15 Q. What parts of the system did your software manage at
16 Xsigo?

17 A. The Xsigo management system managed the switch, the
18 server, and the network adapter cards.

19 Q. Why did you leave Xsigo ultimately?

12:32 20 A. Ultimately, it was about the technical approach they were
21 taking. I thought that it was a suboptimal way of building
22 systems.

23 Q. What did you not like about Xsigo's architecture?

24 A. Xsigo relied on so-called gateway approach for
25 virtualization of the IO functions, and that required heavy

1 modifications to the operating system and emulation of the
2 standard things like Ethernet and fibre channel.

3 Q. So the modifications of the operating system at Xsigo,
4 were those the operating system on the server CPU?

5 A. Yes, that's correct.

6 Q. Did you disagree with that approach?

7 A. Yes. It's a suboptimal way of implementing things like
8 this.

9 Q. Did that approach of modifying the operating system on the
12:32 10 server CPU in Xsigo's architecture have an impact on customer
11 experience?

12 A. Absolutely. The user experience was absolutely affected.
13 One, number one issue is that you have, you have to include a
14 lot of software into the operating system that does very
15 unnatural things, and that restricts the number of operating
16 systems you can support and when you can support those
17 operating systems, so complicating a user's management
18 procedures. And second problem is, because it's a
19 sophisticated piece of software sitting inside the server
12:33 20 within operating system, the CPUs, it introduces slowdowns; the
21 performance is a lot slower because of the software, and the
22 reliability issues are also very common.

23 Q. So who at Nuova recruited you?

24 A. Mr. Prem Jain.

25 Q. And who is Mr. Prem Jain?

1 A. Prem is a legendary figure in the valley. He is a very
2 well-known entrepreneur and he's been a Cisco exec responsible
3 for some of the important products lines at Cisco.

4 Q. Okay. Was there anything from a technical perspective
5 about the Nuova opportunity that made you want to join?

6 A. Yes. Their architecture was drastically different from
7 what I was doing before. It addressed some of the issues that
8 I had in my previous job.

9 Q. And when did you end up joining Nuova?

12:34 10 A. I joined Nuova in the beginning of 2006.

11 Q. Okay. So let's talk about Nuova a little bit.

12 Mr. Dvorkin, do you have slides that leads your testimony
13 today? We are going to put them on the screen.

14 MR. MAGIC: Your Honor, I offer DDX-8 as
15 demonstratives, and we've got those on the screen right now.

16 THE COURT: Very well.

17 MR. MAGIC: Thank you, your Honor.

18 Q. When was Nuova founded, Mr. Dvorkin?

19 A. Nuova was founded, second half of 2005.

12:34 20 Q. Okay. And why was the company called "Nuova" originally?

21 A. The original name was Nuova Impresa. The focus of the
22 startup was to disrupt the way enterprise data centers worked
23 and how computer was consumed.

24 Q. Where did the initial source of funds come from to start
25 Nuova to get it off the ground?

1 A. The initial funding came from the founders. They
2 basically put in their own money.

3 Q. And so, you said the company was founded in 2005. When
4 exactly did Cisco make its initial investment in Nuova?

5 A. That was in the second half of 2006.

6 Q. And that's after you were already there?

7 A. That was after my arrival, that's correct.

8 Q. Okay. So about a year after Nuova was formed, Cisco
9 invested?

12:35 10 A. Yes.

11 Q. Did Cisco provide the initial funding to start Nuova?

12 A. No.

13 Q. Did Cisco commit to funding Nuova from the very start of
14 the company?

15 A. No. It was completely unclear who would provide funding
16 at that time.

17 Q. If you could just get a little closer to the microphone,
18 Mr. Dvorkin. You can pull it toward you.

19 A. Okay. Thank you.

12:35 20 Q. When you started working at Nuova, was there any certainty
21 that Cisco would fund the company at all?

22 A. No.

23 Q. But eventually, in 2008, did Cisco acquire Nuova?

24 A. Yes, they did.

25 Q. Okay. So this trial has been focused on one of the

1 products that Nuova made called UCS. Was UCS Nuova's main
2 product?

3 A. UCS was one of the two product lines we had.

4 Q. And what was the other one?

5 A. The other one was the Nexus 5000 switch product line.

6 Q. And was the Nexus product the main product from Nuova?

7 A. Yes, that was the main product.

8 Q. Did the Nexus product compete with Egenera's product?

9 A. No, it didn't.

12:36 10 Q. Which product did Nuova bring to the market first, the
11 Nexus product or the UCS product?

12 A. The Nexus switch family, Nexus 5000 specifically.

13 Q. And which product was Nuova positioning as the main reason
14 Cisco should invest in and then acquire Nuova?

15 A. Nexus 5000, as it was very innovative in its switching
16 strategy.

17 Q. And when Cisco ended up acquiring Nuova, did you have
18 knowledge of whether most of the payouts for the acquisition
19 were tied to UCS or to Nexus?

12:37 20 A. Majority of the payouts were attached to performance of
21 the Nexus 5000.

22 Q. Not UCS?

23 A. Not UCS.

24 Q. Okay. Let's talk about who founded Nuova. So let's go to
25 the next slide, please, 8.2. So this slide that's on the

1 screen right now shows six people: Mario Mazzola, Prem Jain,
2 Luca Cafiero, Soni Jiandani, Ed Bugnion and Tom Lyon. Are
3 those the founders of Nuova?

4 A. Yes, they are.

5 Q. And let's just talk a little bit about each person, each
6 founder. So who was Mario Mazzola?

7 A. Mario Mazzola was the CEO of Nuova and one of the
8 co-founders. He is a very well-known guy in the valley, in the
9 infrastructure business and specifically in enterprise
12:38 10 networking. He was the man who was responsible for putting or
11 getting Cisco into the switch market. He was the CEO and
12 founder of Crescendo System that Cisco acquired like in the
13 early '90s.

14 Q. And about how many years of experience did Mr. Mazzola
15 bring to Nuova?

16 A. Way over 20. He's been around.

17 Q. Okay. How about Mr. Prem Jain? You did briefly mention
18 him but who is he?

19 A. Prem Jain is the software engineering mind behind the
12:38 20 operation. He's been a longtime associate and business partner
21 of Mario and Luca. He has done lots of interesting things.
22 He's been a Cisco exec for over a decade, and he was
23 responsible, again, for some of the most important product
24 lines at Cisco at that time.

25 Q. And about how many years of experience did Mr. Prem Jain

1 bring to the new company, Nuova?

2 A. Way over 20.

3 Q. Over 20?

4 A. Yes. That's correct.

5 Q. And who is Mr. Luca Cafiero?

6 A. Luca Cafiero is the hardware, is the hardware person in
7 the bunch. So again, like Prem, Luca has been working with
8 Mario Mazzola and the team for many years, and he was, again, a
9 Cisco exec, and he was responsible for many hardware
10 innovations that Cisco had.

11 Q. About how many years did Mr. Cafiero bring?

12 A. Way over 20.

13 Q. Years of experience, I meant?

14 A. Yes.

15 Q. Who is Miss Soni Jiandani?

16 A. Soni Jiandani again is associate and partner of Luca,
17 Prem, and Mario. She was a marketing person, so she was always
18 responsible for marketing projects when she was working
19 together with Luca, Prem, and Mario.

20 Q. And how many years, about how many years of marketing
21 experience did Miss Jiandani bring?

22 A. Way over 20.

23 Q. And now, how about Ed Bugnion who is he?

24 A. Ed Bugnion was the father of server virtualization. He
25 was a founder of a company called VMWare who was the pioneer of

1 the server virtualization market. Before that, he was a
2 researcher at Stanford University, and that's where they come
3 up with the idea for VMWare.

4 Q. Okay. About how many years of virtualization experience
5 did Mr. Bugnion bring to Nuova?

6 A. Probably a dozen at that time.

7 Q. Okay. And then finally Mr. Tom Lyon, who is he?

8 A. Tom Lyon is a hardware legend. He was early on in a
9 company called Sun Microsystems. I don't know if you remember,
12:40 10 they were putting the "dot" in .com back in the late '90s, and
11 he was the first distinguished engineer and core designer of
12 Sun's most critical platforms.

13 Q. And about how many years of experience did Mr. Lyon bring
14 to Nuova?

15 A. Again, way over 20.

16 Q. So just in total, about how many years of experience did
17 all of these founders collectively bring to Nuova?

18 A. More than a century. Very experienced people.

19 Q. In what area?

12:41 20 A. In infrastructure, networking, servers, virtualization,
21 and system design.

22 Q. After Cisco acquired Nuova, did Cisco launch UCS as a
23 product?

24 A. Yes.

25 Q. And when was that; when did Cisco start selling UCS?

1 A. Cisco started selling UCS in summer 2009, I'm going to
2 say.

3 Q. Okay. Who was Cisco's first customer for UCS?

4 A. Cisco's first customer for UCS was Cisco IT.

5 Q. The IT department?

6 A. Yes.

7 Q. Okay. And at Nuova, did UCS have a code name?

8 A. Yes, it was called "California."

9 Q. And what's the story behind the code name "California"?

12:41 10 A. They original name was "computer array," and that
11 abbreviated to C-A, and we live in California, so it looked
12 like the abbreviation for California that we put into our
13 addresses.

14 Q. So coincidence of sorts?

15 A. Purely coincidental, yeah.

16 Q. Okay. Let's talk about UCS and its development. So to
17 start, can you give an example of a type of application that a
18 customer might run on UCS?

19 A. A customer would run any enterprise application. For
12:42 20 example, at one of our customers, Fedex, they ran package
21 tracking software, and a lot of, like, warehouse-related
22 software; and financial, at financial customers, they ran
23 training software, like, for, like, in bank operation stuff.
24 At retail customers, they basically ran all of the retail
25 software for people, but they also ran, like, customer

1 relationship management type of application, HR software, like
2 database, like anything that a normal enterprise would normally
3 run.

4 Q. Okay. Let's turn to the next slide, DDX 8.3. So in
5 total, about how many employees at Nuova worked on UCS?

6 A. About a hundred.

7 Q. A hundred?

8 A. Yes.

9 Q. And where did Nuova hire its developers from?

12:43 10 A. Well, we hired from any company that had any experience
11 with building sophisticated infrastructure in data centers.

12 Q. So that would be a range of companies across the industry?

13 A. Yes.

14 Q. Can you give some examples?

15 A. Like for example, Cisco. This is where Cisco drew the --
16 where we got the majority of the networking talent because they
17 were literally networking.

18 Google, you hire people because they have experience with mass
19 scaling for structure and animation, and dealing with aol to
12:43 20 scale that nobody else has.

21 The VMWare, for example, would be the source of the best server
22 virtualization people.

23 Sun Microsystems, they made some of the best servers in the
24 '90s. They made amazing hardware.

25 Veritas was the leader in storage virtualization, so getting

1 storage people would be reasonable -- that's where you would
2 get reasonable storage people.

3 Xsigo virtualizations, that's where I came from. There were
4 also people from Intel because most servers ran Intel chips.

5 Q. Okay.

6 A. CPUs.

7 Q. Thank you, Mr. Dvorkin. Is it, in your experience in the
8 computer networking, you know, companies that you've worked at,
9 is there anything unusual about hiring from across the
10 industry?

11 A. You want to hire the best team with, like, most diverse
12 background.

13 Q. Did Nuova's UCS product developers come from Egenera?

14 A. No, they didn't.

15 Q. Okay. Let's talk more about the components of UCS and the
16 work that went into building those components. So we can go to
17 the next slide, please, DDX 8.4. So how many years did it take
18 for Nuova to design and then actually implement that design to
19 create UCS?

20 A. About three years.

21 Q. And can you explain the difference between design and
22 implementation?

23 A. Design is identification of the architecture, major
24 components, and what goes into, like, how customer interacts
25 with a system.

1 Q. Around when was the design process complete for UCS?

2 A. Much of the design was complete in 2006.

3 Q. All right. Now, let's just go back to the slide and talk
4 about the components. So we're going to start with the "Fabric
5 Interconnect." Actually, before I get there, about how many
6 engineers total worked on the team that designed UCS?

7 A. About 60 engineers.

8 Q. And you were there at the time?

9 A. Yes, I was there at the time.

12:45 10 Q. All right. Let's start with the fabric interconnect and
11 talk about the different components. So would you just remind
12 us first what that is, what's the fabric interconnect?

13 A. Fabric interconnect is basically a switch. It's a device
14 that connects servers together, allows them to talk to each
15 other and also connects them to external servers, like other
16 servers that are sitting outside of the system storage and the
17 internet.

18 Q. Is there special software on the fabric interconnect?

19 A. Yes, fabric interconnect also included UCS Manager, the
12:46 20 stuff that I was responsible for.

21 Q. And I want to just briefly detour to a term. Did Nuova
22 ever refer to the fabric interconnect as a "control node"?

23 A. Yes, they did.

24 Q. Okay. And why did Nuova call the fabric interconnect a
25 control node?

1 A. Because that's where management function was running.

2 Q. And had you used that term since before the 2000s when
3 Egenera was found?

4 A. Yes, it's a very commonly-used term.

5 Q. Based on your experience, was Egenera the first company to
6 use the term "control node"?

7 A. Absolutely not.

8 Q. Okay. Back to the slide. How big was the team of
9 engineers that worked on the fabric interconnect?

12:46 10 A. Twenty.

11 Q. Okay. Now, the chassis, that's the next component. Can
12 you remind us what that is?

13 A. Chassis is a hardware shelf into which servers or blades
14 are inserted. Also, it houses the mezzanine cards, which are
15 the network adaptors, and also, you put in power supplies and
16 fans for cooling.

17 Q. And servers are also called "blades," you said?

18 A. Yes.

19 Q. Okay. We heard from Egenera that their product was called
12:47 20 the BladeFrame. For how long has the industry used the blade
21 in a chassis formation?

22 A. For a very long time.

23 Q. Is that before Egenera existed?

24 A. Yes, that's correct.

25 Q. Did Egenera invent blades in a frame?

1 A. No.

2 Q. And how big was that team of engineers that worked on a
3 chassis?

4 A. About five people.

5 Q. All right. We're moving onto servers, and so, how big was
6 the engineering team that built the servers at Nuova?

7 A. About 15 people.

8 Q. And another term that I want to briefly address is
9 processing nodes. Did Nuova ever refer to the server as the
12:48 10 "processing node"?

11 A. Yes, they do.

12 Q. And why was that?

13 A. Because it's a commonly-used term for anything with a
14 processor you run applications on it.

15 Q. And had you used that term in your work before Egenera
16 existed in the 2000s?

17 A. Yes.

18 Q. How far back?

19 A. Like '90s.

12:48 20 Q. Okay. Was Egenera the first company then to use the term
21 "processing node" in your experience?

22 A. No.

23 Q. Now we're going to move onto the network adapter in the
24 UCS. So, how big was the engineering team that designed the
25 network adapter?

1 A. Fifteen people.

2 Q. And that's also called a "NIC," right?

3 A. Yes, that's also called a NIC.

4 Q. Did Nuova design its own network adapter?

5 A. Yes, a lot of work went into it.

6 Q. Can you remind us of the special role that the network
7 adapter has in UCS?

8 A. Network adapter was the device into which we programmed
9 network identities, as well as the network topology and all of
12:48 10 the network information.

11 Q. Okay. Now we'll move onto UCS Manager. So how big was
12 the engineering team that designed UCS Manager?

13 A. Twelve people.

14 Q. And is UCS Manager, software?

15 A. Yes, it's purely software construct.

16 Q. Does software involve computer code?

17 A. Yes.

18 Q. So about how many lines of code did the Nuova team have to
19 write to make UCS Manager?

12:49 20 A. A lot of codes, like over a million lines.

21 Q. And what role did you have in particular in Nuova's UCS
22 Manager?

23 A. I was the chief architect. I was one of the main
24 implementers.

25 Q. And the purpose of UCS Manager is, can you remind us of

1 that again?

2 A. The purpose of the UCS Manager was to manage the UCS
3 system, which means programming the -- allocate, programming
4 the network adapters and programming the fabric interconnect.

5 Q. Egenera's expert witness told the jury that UCS Manager
6 programmed server CPUs to establish the network topology. Is
7 Egenera's expert witness correct about that?

8 A. No.

9 Q. Why not?

12:50 10 A. Because we programmed the interface card.

11 Q. How do you know that, Mr. Dvorkin?

12 A. I was there. I was one of the core architects of the
13 system.

14 Q. Now, Egenera's expert also said that the CPUs in the
15 servers in UCS are programmed because they know about or
16 discover the information about the network adapters as
17 peripheral devices in the servers. Do you agree that the
18 process Egenera's expert's referring to means UCS programs the
19 CPUs?

12:50 20 A. No.

21 Q. And Egenera, as I mentioned, referred to the network
22 adapter as a peripheral device. What's an every day example of
23 a peripheral device that can be plugged into a computer?

24 A. Like a USB thumb drive.

25 Q. And when you plug in a USB thumb drive, the CPU of the

1 computer, like, becomes aware that it exists, right?

2 A. It gets discovered by the operating system.

3 Q. Can the CPU interact with and talk to the USB drive in
4 that example?

5 A. Yes.

6 Q. When a person plugs their USB drive into a computer, does
7 that program the CPU of the computer?

8 A. No, it doesn't.

9 Q. In your analogy, is the USB drive like a network adapter
12:51 10 in UCS?

11 A. Yes, absolutely.

12 Q. And in UCS, does the computer code of the server operating
13 system actually change when the network --

14 MR. SCHENKER: Objection. He is leading the witness.

15 MR. MAGIC: I'm asking a question about how UCS works.

16 THE COURT: No, it's acceptable.

17 Q. In UCS, Mr. Dvorkin, does the computer code of the server
18 operating system change when the network adapter gets its
19 network identity from UCS Manager?

12:51 20 A. No.

21 Q. All right. Mr. Dvorkin, I'm going to show you what we've
22 been calling Cisco's bedrock fact number three. Okay. Showing
23 you the trial transcript actually from day one, page 67 lines
24 11-15. And so, we have Cisco bedrock fact number three. I'll
25 just read it to you to start. "Cisco UCS does not set up the

1 network by programming the processors. We program the NICs.
2 We designed the NIC ourself. The NIC is not a CPU. We do not
3 infringe the claim."

4 Egenera's expert told the jury that Cisco bedrock fact number
5 three is false, it's incorrect. But you designed UCS Manager
6 and how it works with the servers and the NICs. So I want to
7 ask you a question about bedrock fact number three. In the
8 first sentence, or is the first sentence -- we'll go sentence
9 by sentence -- is the first sentence true, "Cisco UCS does not
12:52 10 set up the network by programming the processors"?

11 A. The statement is true.

12 Q. And the second sentence, is that true that Cisco programs
13 the NICs and designed the NIC itself?

14 A. Yes.

15 Q. And is it also true, the third sentence, that the NIC is
16 not a CPU in UCS?

17 A. That is true, the NIC is not a CPU. These are completely
18 different things.

19 Q. And as the designer of UCS Manager, is it true in this
12:53 20 regard, that UCS operates differently from Egenera's patent?

21 A. Very much, yes.

22 Q. So bedrock fact number three is true?

23 A. Yes.

24 Q. Okay. Thank you, Mr. Dvorkin. Let's talk about who
25 designed UCS. That's our next topic.

1 Did any anyone from Egenera work on designing UCS, Mr. Dvorkin?

2 A. No.

3 Q. Okay. Let's look at a slide. Let's look at a slide that
4 Egenera used in this trial. It's on the screen right now.
5 It's PDX 7-15. So Egenera has told the jury that Cisco must
6 have copied the BladeFrame because it hired the people on the
7 slide here who used to work at Egenera, and so, I have a few
8 questions for you, Mr. Dvorkin.

9 The company that created UCS, is that Nuova or was it Cisco?

12:54 10 A. Nuova.

11 Q. And this slide is titled: Egenera Employees Hired By
12 Cisco, right?

13 A. That's correct.

14 Q. Okay. So, what I'd like to do with you is I'd like to
15 correct this slide so that we can actually talk about the
16 individuals who actually worked at Nuova, just those
17 individuals, whoever had Egenera in their employment
18 background.

19 So to do that, I'd like to refer to JTX-518, which is a list of
12:55 20 individuals who worked at either Nuova or Cisco, and it's
21 already in evidence, so I'm going to put that on the ELMO for a
22 second.

23 So Mr. Dvorkin, as you can see in JTX-518, there is a table,
24 right? And there is an "Employer" column, do you see that?

25 A. Yes, I can see that.

1 Q. Okay. And in this table that's JTX-518, there is a "Both"
2 for any employee listed as having worked at both Nuova and
3 Cisco, meaning they started at Nuova and eventually ended up at
4 Cisco from the acquisition. Do you follow me?

5 A. Yes.

6 Q. Okay. So what I've done is I've pre-circled the "both"
7 entries, anyone who actually worked at Nuova. So that would be
8 five entries total. I've got three on the first page, and let
9 me know if you see any others. And then, yeah, two on the
12:56 10 second page, so five total. And you follow me so far?

11 A. Yes.

12 Q. Okay. All right. So, in total we've got five people in
13 JTX-518 who actually had an Egenera employment background and
14 ended up at Nuova, right?

15 A. Right.

16 Q. Okay. All right. So what I want to do is go back to the
17 slide, and I'm going to, I'm going to first change the title to
18 focus on just Nuova so we're talking about only Nuova now. And
19 what I'm going to do is I'm going to circle just the five
12:57 20 people that we saw in JTX-518 as having an entry for "both;" so
21 that's Scott Clark, that is Blaine Lincoln, that is, let's see,
22 Jeremy Moulton, and that is Satinder Sethi, and Jason Shaw.
23 And what I'm going to do is I'm going to cross out everyone
24 else because they didn't work at Nuova. It's just the five
25 people from Exhibit 518 that we're focused on now on the slide.

1 Follow me so far, Mr. Dvorkin?

2 A. Yes.

3 Q. So now I want to ask you some questions about those five
4 people. Did any of those five people, Mr. Scott Clark, Blaine
5 Lincoln, Jeremy Moulton, Satinder Sethi, Jason Shaw work on
6 your team that designed the management software of UCS?

7 A. No, none of them did.

8 Q. Were you in all the design and architecture meetings for
9 UCS at Nuova?

12:58 10 A. Yes.

11 Q. And how many design and architecture meetings are we
12 talking about?

13 A. In the first year, hundreds.

14 Q. Hundreds?

15 A. Yes.

16 Q. Okay. Were any of these five people ever present in any
17 of those design and architecture meetings for UCS?

18 A. No.

19 Q. Let's look at the timing of when each of those five
12:59 20 individuals joined Nuova. So we're going to now go back to the
21 dates that are on JTX-518. Mr. Blaine Lincoln, according to
22 JTX-518, joined on April 21, 2008; do you see that?

23 A. Yes.

24 Q. In April 2008, is that when Cisco acquired Nuova?

25 A. That was right around there sometime, yup.

1 Q. Okay. So what was the state of the design of UCS by the
2 time Mr. Lincoln joined the company?

3 A. Oh, that was very much done by that time.

4 Q. So did Mr. Lincoln work on the design of UCS?

5 A. No, he didn't.

6 Q. What was his job function?

7 A. He was in the services organizations.

8 Q. And what's the "services organization;" what's that kind
9 of role?

12:59 10 A. Service organization works with a customer and helps the
11 customer adopt a product through their environment and help,
12 for example, move applications from other platforms to the new
13 platform or adopt the management tools.

14 Q. Is services a product design role?

15 A. No.

16 Q. Does a services person get to decide the product design?

17 A. No, they don't.

18 THE COURT: All right. This might be a good place to
19 stop, it being 1:00. So we don't make a mistake again, I have
01:00 20 plaintiff at 12 hours 23 minutes; defendant, six hours and 47
21 minutes.

22 All right, jurors. Good day, good progress in the material,
23 and we'll meet again tomorrow at 9 o'clock.

24 THE CLERK: All rise.

25 (Jury and court depart.)

1 (Court adjourned at 1:00 p.m.)

2 C E R T I F I C A T E.

3
4 We, Debra M. Joyce, Official Court Reporter for the United
5 States District Court for the District of Massachusetts, and
6 Lisa McDonald, RPR, RMR, CRR, do hereby certify that the
7 foregoing pages are a true and accurate transcription of our
8 shorthand notes taken in the aforementioned matter to the best
9 of our skill and ability.

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/s/Debra M. Joyce
Debra M. Joyce

August 9, 2022

/s/Lisa McDonald
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